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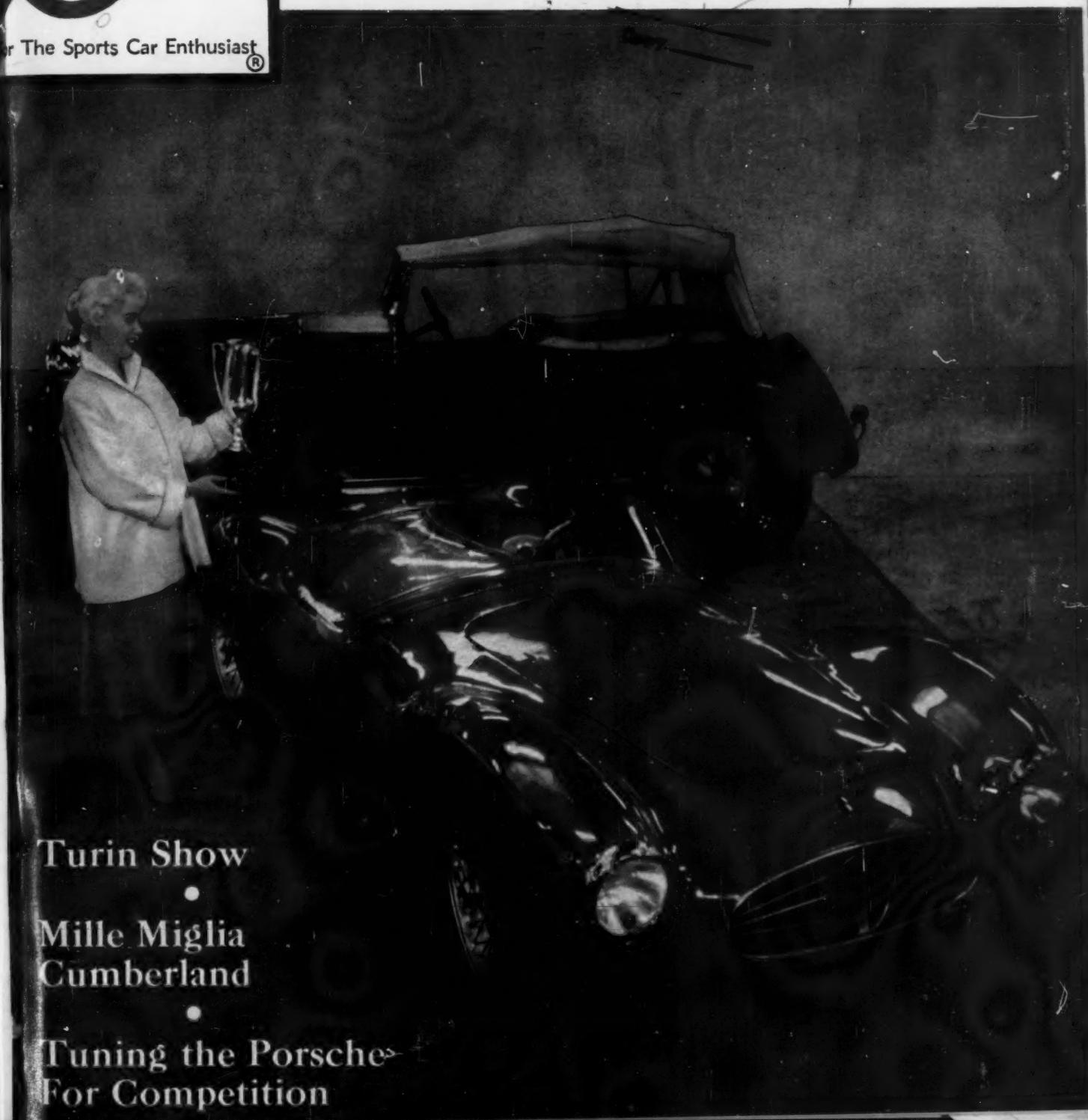
SPORTS CARS ILLUSTRATED

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Turin Show

Mille Miglia
Cumberland

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For Competition

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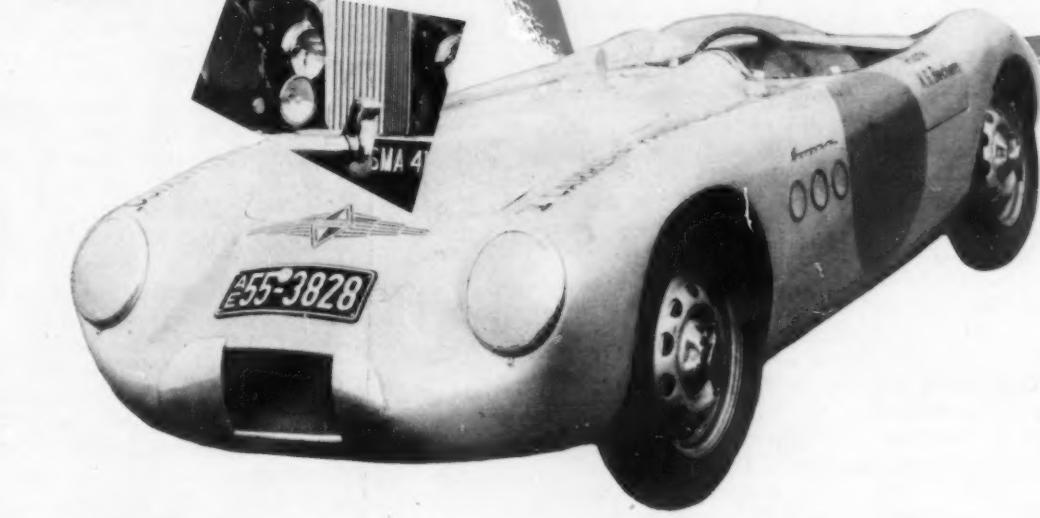
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SPORTS CARS ILLUSTRATED

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august 1955
no. 2 vol. 1

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The arresting composition on our cover this month of the sleek Maserati, the classic Bentley—and the blonde—was Ektachromed by Picture Editor Gene Thomas. The cars are from Momo Corporation of New York.

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EDITORIAL

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competition

| | |
|---------------------------------|----|
| <i>The Thousand Miles</i> | 11 |
| <i>Mountain Mushroom</i> | 39 |
| <i>Duel in the Desert</i> | 45 |

technical

| | |
|---|----|
| <i>The Mercedes 190SL</i> | 16 |
| <i>Light Lightning—the 3-liter Maserati</i> | 24 |
| <i>Tuning the Porsche</i> | 31 |
| <i>Geared to Go</i> | 48 |

features

| | |
|---------------------------------|----|
| <i>The Turin Show</i> | 6 |
| <i>Fast Fashions</i> | 20 |
| <i>To Be or Not to Be</i> | 27 |
| <i>The Big BAT</i> | 34 |
| <i>Heroine Driver</i> | 36 |
| <i>Out to Lunge</i> | 38 |

departments

| | |
|----------------------------------|----|
| <i>The Editor's Page</i> | 5 |
| <i>Review of Events</i> | 50 |
| <i>Shop Talk</i> | 52 |
| <i>European Newsletter</i> | 53 |
| <i>Club News</i> | 51 |
| <i>On the Schedule</i> | 54 |

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the Editors' Page

WITH the Detroit-predicted slump in sports car sales stubbornly refusing to materialize, and the growing lists of members in different clubs indicating that a large percentage of the new owners take their sport seriously, the problems of owning and driving something other than a standard automobile are rapidly disappearing.

On the other hand, nothing seems to have been done as yet to improve the quality of service accorded to imported machines by a great many of the garages catering to such service.

All too much of the work done on many of the cars is slipshod, overpriced, and quite often improperly done. It has been the mourning bench for the owners for some time, and the theory that the poor outfits giving sub-standard service would gradually disappear seems to have been refuted. All too often we have seen shops that live on doing only one job for each customer, and then hoping some other trusting but uninformed stranger will wander in to pay the bills next week.

It is a matter of economic fact that in a combined sales and service shop the shop must pay the overhead for the whole outfit. Quite often this is as near piracy as you can get without a black flag and a plank for unsuspecting owner to walk.

We feel that now that the parts supply for almost all makes imported into the country has been of late adequately provided for, and that no one should be more than a couple of days at the most by air from a generous supply depot. At the same time all the parts in the world will be useless if the manufacturers fail to take an active interest in the service being rendered (or rented) with them. We feel that the manufacturers of imported cars would do both themselves and their customers a truly gargantuan favor by setting up a standard of service for their products and refusing parts to concerns that fail to meet this minimum.

To help bring this about, I would suggest that anyone who has a car serviced and finds that the work was actually substandard contact the manufacturer or his representative in this country. All are anxious to have their products appear in their best light, and will make every effort to correct any dubious affiliates to their organization.

* * *

While on the subject of mechanics, and service for sports cars, there is another very ticklish philosophy that seems to be very much in vogue of late, and one with which we have some disagreement. That is the bland statement that

"We might as well replace it while we've got it torn down."

This may be very apropos of some situations. Certainly, if you had a clutch facing replaced the throw out bearing is a minor bit of additional insurance that shouldn't break the bank. On the other hand, the wholesale addition of such items as crankshafts to facilitate bearing jobs should be out of the question.

* * *

Mercedes has again entered sports car competition, and with an even more devastating performance than their first postwar venture a few years back. This deserves more than the usual report, although the facts are most obvious. The famous three-pointed star seems to have established a reputation for ability to jump into an activity and walk away with the top honors almost at will. Johnny Fitch, driving one of their standard production cars, placed fifth in the Mille Miglia. This is a factor worth considering in conjunction with the outright and overwhelming win of the factory cars.

In the first place, it is a fact that requires no repetition (except to those who ask how one wins races) that Herr Neubauer's preparations for an event are as precise and thorough as the planning of a military campaign. He leaves very little to chance and feels even then that the chances which must be taken should be only those that have extremely high odds in Mercedes' favor. So much for the mechanics of running a racing team. This year the odds were upset both by his own planning and Kling's unfortunate accident. He placed Moss in front to blow up the opposition. Sterling accomplished this, but went on to shatter records all over the place.

Here Mercedes, with two cars finishing, come home one-two. Both easily smashed last year's record to smithereens. This, as we have commented, was to have been more or less expected from the past performances of the Stuttgart organization. What was most startling was the almost record time turned in by Fitch in a production Mercedes in winning fifth spot honors. We have come to see the bigger European events dominated more and more by factory "prototypes" and organizations that have all but swept the field clear of the private entry. In fact, it has reached a point where one expects such factory victories and when one of the production cars manages to hold its own in the field we feel that both builder and driver deserve a "well done!" from the many, many enthusiasts who have the best interest of the sport at heart.

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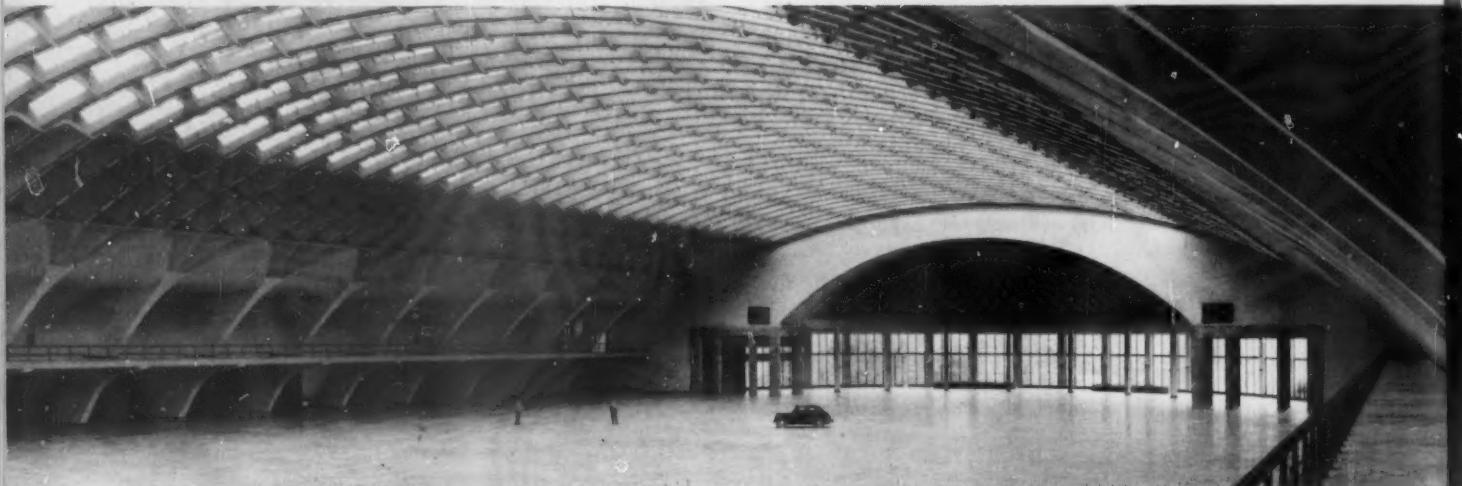
Ghia-bodied Ferrari 375.



Bretoni Arnolt-Bristol.



Vignale Coupe on 1500 OSCA.



An early arrival is dwarfed by the new home of the Salone Internazionale Dell' Automobile.



Fiat-based 1100 Abarth.

the Turin show

THE Turin Auto Show, the 37th, this year unveiled some of the most interesting advances in auto styling ever seen in this international event. More than 450 exhibitors from 13 countries showed their wares. Nations represented were Austria, Belgium, Denmark, France, Holland, Germany, Italy, South Africa, Spain, Sweden, Switzerland, England and the United States.

As usual, sports cars, together with the top luxury types such as the new Rolls, took the spotlight.

All the well-known makes were represented. Citroen, Peugeot, Renault, Daimler Benz, Abarth, Alfa Romeo, Ferrari, Maserati, Austin Healey, OSCA, Lancia, MG, and many others, 67 makes in all, came up with new and improved models. This figure includes the Detroit iron.

As the accompanying pictures show, many of the new designs revealed radical departures. Power plants also have been drastically revised and improved. You can almost see the records falling when these beauties take the road this year.



*The 2500 Lancia Aurelia
by Farina has been designated
the Spyder "America."*



"Gilda" by Ghia.



Boano-bodied Fiat 1900.

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FRANCE

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SWEDEN

SOUTH AFRICA

SPAIN

BELGIUM

ITALY



Michelotti-designed Vignale Rolls Royce.

Maserati Tipo 150/S—1500.



Ghia 4.5 Ferrari.





Chrysler-Ghia combination.



Fiat 1100 Tipo Veloce



Canta's 1100 Fiat TV.



Abarth's striking Scorpion.



*Alfa Romeo Giulietta
coming and going.*



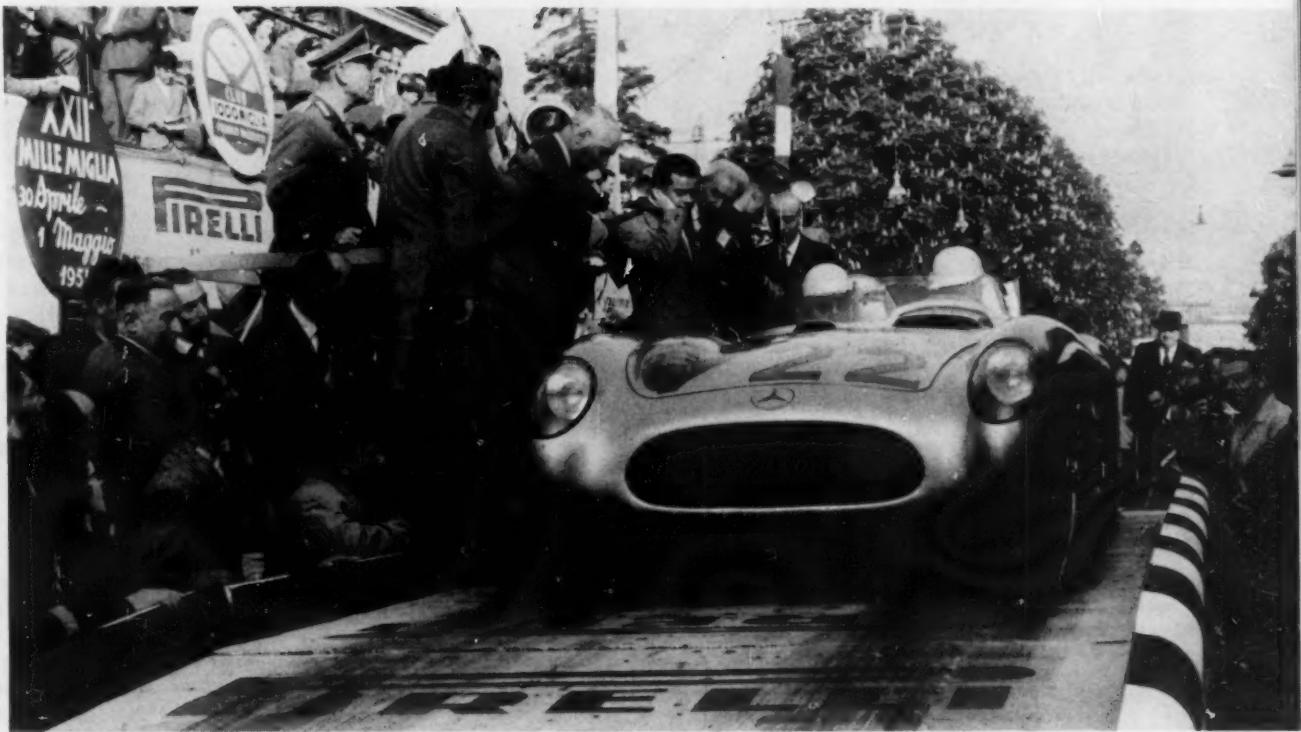
*Boano's startling best
on the Abarth Scorpion.*



*Farina-enhanced 600 Fiat
equals luxurious economy.*

the thousand miles

ONCE each year the whole central portion of Italy is thrown open to racing, real road racing of the sort that has all but vanished these days. The tortuous course of the Mille Miglia brings cars screaming down the usually peaceful Eastern coast of Italy, through Ravenna, touching the mountains lightly to Ancona and Piscara. From there the road to Rome twists and turns through mountains that test, as no other road can, the capabilities of car and driver. Then north again through more mountains, across straight flat stretches and back into Brescia. This has always been one of the races that capture the imagination of the international drivers and the enthusiasts—the idea of 1,000 miles (actually only 992, but



*Stirling Moss taking off
in the Mille Miglia.
Plans were for him to set
a fast pace in the Mercedes
to draw out the Ferraris.*



Neubauer happily embraces Moss and Jenkinson.

near enough) through normal roads, across regularly traveled routes, and through crowds that exceed their enthusiasm only by their lack of caution.

This year there was more than the usual to spellbind the thousands that waited for hours for the cars to flash past along the route. The Mercedes Benz Corporation had launched a new sports car, the 300SLR, and this was to be its debut, a true baptism of fire. The Silver Star and the Prancing Horse were to contest the first major race of the year and the whole motoring world was anxiously awaiting the outcome.

In fact, the practice and preparation of the cars had been watched for weeks, and speculation on this or that car's strong and weak points ran rife among the steadily growing ranks of spectators. The Mercedes, Ferrari, Maserati and almost countless Topolino based specials had toured the course and the atmosphere had built up to equal the engine's crescendo by the time race weekend rolled around.

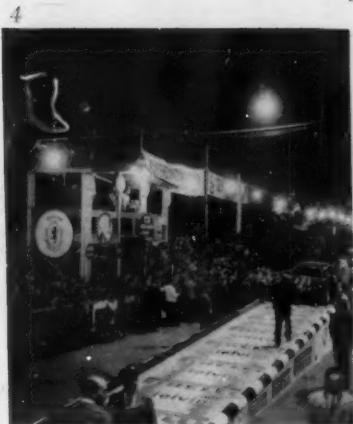
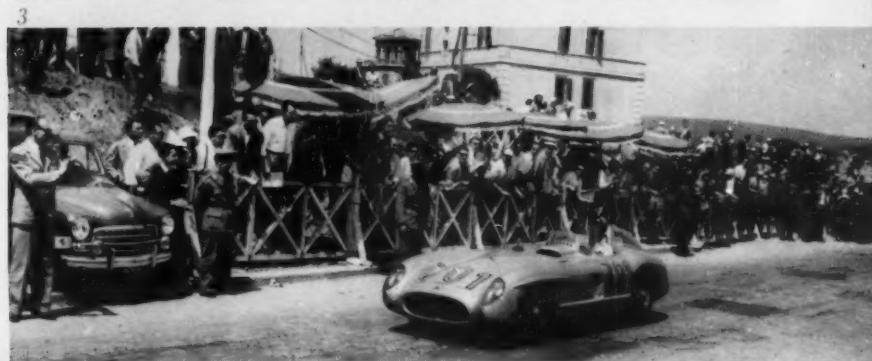
The race began with each contestant driving up onto a ramp, then as the starter's flag drops, screaming off into the night through a solid wall of humanity that magically opens (to about six feet) before the cars and surges to behind them like water at the prow of a boat. First away are the smaller cars, Fiats, Fiat-based specials like the Giaur, Stanguellini, Panhard, DBs, Renaults and hosts of others, then the larger cars like the OSCA, Porsche, Maserati, all the way up to the four to five-liter behemoths.

The first car away into the night was a tiny Fiat, and the string stretched into 521 cars trying for the more than \$35,000 in prizes offered to the contestants. The high point came when Moss blasted down the ramp and off toward the Adriatic. Following the Englishman was

Castellotti, then Hermann, Maglioli, Marzotto, Fangio and Taruffi, in the accepted theory of the longer races. Moss and Castellotti were to draw each other out, try if possible to force one another to push his machine past the breaking point and open the way for the, theoretically, stronger contenders following.

Fangio left toward the dawn at a pace of 111 mph. for Verona, only to be passed by a suddenly non-conservative Marzotto screaming along at 123! The pace was too much for the components though, and as the cars neared the Adriatic a tire came apart and one of the Ferrari hopefuls was out of the race and limping back to Brescia. The crowd along these stretches caused apprehension among many of the drivers and as the cars turned toward the south at Vincenza many described the course as overly dangerous.

Down the stretches toward Pescara, where the road unfolds reasonably straight and smooth Moss took the lead and he and Taruffi ate up the miles in 116 mph. gulps. The assortment was mathematical here, trailing Hermann (Mercedes), Castellotti (Ferrari), Kling (Mercedes), Maglioli (Ferrari), and last Fangio, content to let the others weed themselves out, or wear themselves down before the writhing mountain roads were encountered. Past Ravenna the silver-haired Taruffi jumped into the lead and rocketed the more maneuverable Ferrari toward Pescara and Rome. Relying on his greater ability in the mountains and calling upon all of his considerable skill and experience he stood off the Mercedes challenge past Pescara, while his teammate Castellotti dropped by the wayside with engine ailments. Between Pescara and Rome, the irrespressible Moss took the lead in the clumsier Mercedes, and held it against Taruffi's challenge until the Italian



1. Young spectators view remains of Fiat driven by Morelli which crashed near Rome. 2. Abecassis about to take off in Austin-Healey. 3. Karl Kling at a control point. 4. The start at Brescia. 5. The victorious Mercedes. 6. The winner and new champion. 7. Kling broke three ribs when he roared off the road after skidding on a bend. He crashed into a tree when he deliberately swerved to avoid hitting crowd.

ace's oil pump quit between Viterbo and Radicofani.

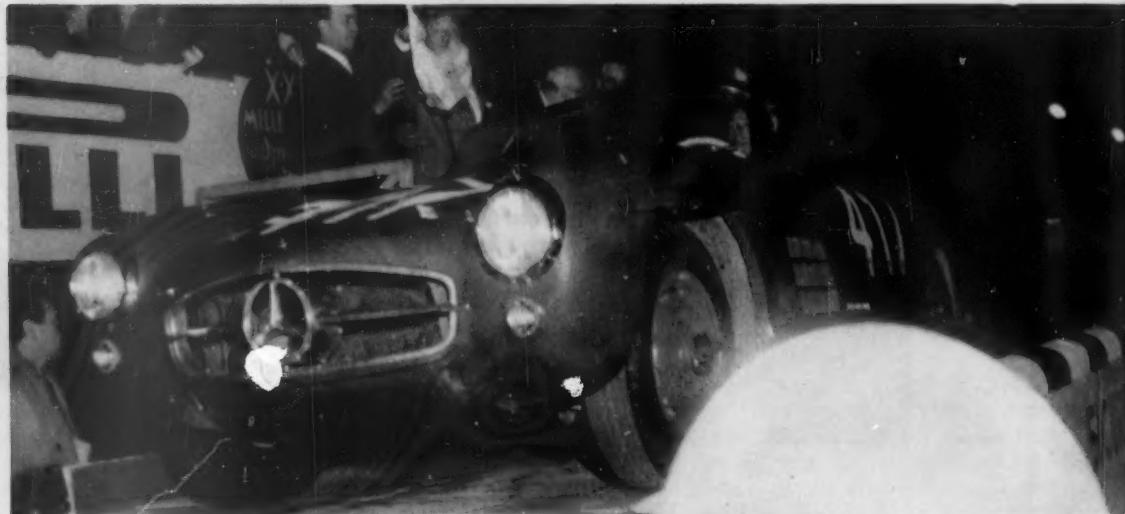
It was on these same terrible passes through the Apennines that the methodical Kling thoroughly crashed, breaking three ribs and retiring from the battle. Now only Maglioli was left to challenge the three Mercedes but the pace Moss and Hermann were setting was too great. Moss had shattered all previous records to Florence, as had his running mate Hermann but the latter smashed the fuel tanks on the Mercedes and was forced to retire. At Florence Moss' record of 97 was the highest yet attained but on to Bologna and Brescia for the finish he continued to pick up precious seconds on the following cars and when the silver car thundered under the finishing banner he was almost ten miles an hour ahead of the previous record. Second spot went to Fangio in another Mercedes with Maglioli pushing the lone remaining Ferrari into third. Fourth went to Giardini in a two-liter Maserati, along with a class win and Johnnie Fitch had accomplished the near

miraculous by coming in fifth in a production Mercedes 300 SL. The smaller classes went to the Italians in the two-liter category, with a pair of Maseratis backing up Giardini's win but the German contingent had moved into these premises too, with Seide in a Porsche averaging a bit more than the second place 2000 cc. car could manage. Seide was followed by Descolalnges in an OSCA and then Launtenschlager in another Porsche.

In the diminutive Class H, the DB, Stanguellini and Panhard were driven to victory by Storez, Auricchio and Navarro to climax the fastest Mille Miglia yet held.

In this running, the 22nd of the classic grind, the speed was not only the highest, but it marked the only non-Italian victory since 1940. The carnage was negligible for this event with only five drivers and fifteen spectators hurt—the latter by a tourist car, so the 1955 circuit can claim to be both the safest, and fastest yet held.

Johnny Fitch placed fifth driving beautifully in small Mercedes.



Moss and Jenkinson get checkered flag at the end of the record run.

Mercedes team members are required to know every detail about the cars they drive. Here Moss makes a change of the rear wheel.



THE RECORD

| Year | Driver | Co-Driver | Car | Speed (mph.) |
|------|--------------|------------|---------------|--------------|
| 1927 | Minoia | Morandi | OM | 47.99 |
| 1928 | Campari | Ramponi | Alfa-Romeo | 52.24 |
| 1929 | Campari | Ramponi | Alfa-Romeo | 55.73 |
| 1930 | Nuvolari | Guidotti | Alfa-Romeo | 62.42 |
| 1931 | Caracciolo | Sebastian | Mercedes Benz | 62.85 |
| 1932 | Borzacchini | Bignami | Alfa-Romeo | 68.28 |
| 1933 | Nuvolari | Compagnoni | Alfa-Romeo | 67.46 |
| 1934 | Varzi | Bignami | Alfa-Romeo | 71.03 |
| 1935 | Pintacuda | Dellastufa | Alfa-Romeo | 71.30 |
| 1936 | Brivio | Omgaro | Alfa-Romeo | 75.57 |
| 1937 | Pintacuda | Mambelli | Alfa-Romeo | 71.30 |
| 1938 | Biondetti | Stefani | Alfa-Romeo | 84.13 |
| 1940 | von Hanstein | Baumer | BMW | 85.0 |
| 1947 | Romanò | Biondetti | Alfa-Romeo | 69.74 |
| 1948 | Biondetti | Navone | Ferrari | 75.33 |
| 1949 | Biondetti | Salani | Ferrari | 81.68 |
| 1950 | Marzotto, G. | Crosara | Ferrari | 76.56 |
| 1951 | Villoresi | Cassini | Ferrari | 75.10 |
| 1952 | Bracco | Rolfo | Ferrari | 79.726 |
| 1953 | Marzotto, G. | Crosara | Ferrari | 88.39 |
| 1954 | Ascari | | Lancia | 87.53 |
| 1955 | Moss | | Mercedes | 97.96 |



the
Mercedes

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Engine of the Mercedes sports touring car has low gas consumption thanks to the design of the intake and outlet ports and to the advantageous arrangement of combustion chambers and spark plugs.



Specifications Mercedes-Benz Model 190 SL

ENGINE

| | |
|---|---|
| Principle of operation | Four-stroke |
| Engine output* | 105 hp./5700 n (SAE 120 hp.) |
| Number of revolutions at 62 mph. (100 km/h) | 3,245 |
| Max. number of revolutions | 6,000 |
| Number of cylinders | 4 |
| Bore/stroke | 3.34/3.29 ins. (85/83.6 mm.) |
| Total eff. capacity | 115 cu. ins. (1,897 c.c.) |
| Compression ratio | 8.5:1 |
| Max. torque (mkg/n) | 14/3,800 |
| Firing order | 1-3-4-2 |
| Crankshaft bearings | 3 four-metal bearings |
| Valve arrangement | Overhead |
| Carburetors | 2 Solex horizontal compound carburetors |
| Oil cooling | Oil-water heat exchanger |
| Oil filling of crankcase (max./min.) | 8.4 US pts./5.2 US pts. |

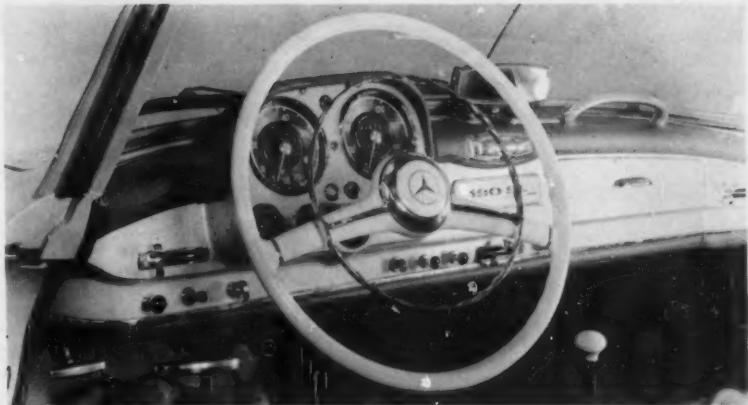
Cooling Water circulation by pump and fan

CHASSIS
Transmission DB-4-gear transmission, synchromesh in all gears

| Transmission ratios: | |
|-----------------------|------------------------------------|
| First gear | 3.40:1 |
| Second gear | 2.00:1 |
| Third gear | 1.29:1 |
| Fourth gear | 1.00:1 |
| Reverse gear | 3.29:1 |
| Rear axle ratio | 3.70:1 |
| Steering | Daimler - Benz recirculating balls |

| Climbing ability: | |
|-------------------|-----------|
| First gear | 1 in 2.1 |
| Second gear | 1 in 4.1 |
| Third gear | 1 in 7.5 |
| Fourth gear | 1 in 10.8 |
| Maximum speed in— | |

Instruments are mounted at a high level to lie within the angle of vision when one looks at the road.



The touring car can be lightened in various ways and several modifications are available upon request for participation in racing events.

| | |
|-----------------------------|---------------------|
| First gear | 33 mph. (54 km/h) |
| Second gear | 57 mph. (92 km/h) |
| Third gear | 90 mph. (145 km/h) |
| Fourth gear (approx.) | 112 mph. (180 km/h) |
| Wheels | Disc wheels |

| | |
|---------------------|--|
| Size of tires | 6.40x13 Special Racing |
| Brake system | Turbo-cooled brake drums, brake shoes with autom. adjustment front and rear, front 2 leading, rear 1 leading and 1 trailing brake shoe |

VEHICLE

| | |
|-------------------------------|--------------------------------|
| Overall length | 165 ins. (4,220 mm.) |
| Overall width | 68 ins. (1,740 mm.) |
| Overall height unloaded | 52 ins. (with top) (1,320 mm.) |
| Wheelbase | 94 ins. (2,400 mm.) |
| Track, front | 56 ins. (1,430 mm.) |
| Track, rear | 58 ins. (1,480 mm.) |
| Ground clearance with two | |

| | |
|--------------------------|---------------------|
| passengers | 6 ins. (155 mm.) |
| Turning circle | 36 ft. (11 m.) |
| Clocked max. speed | 112 mph. (180 km/h) |
| Tank capacity | 17.1 US gals. |
| Reserve | 1.5 US gals. |

WEIGHT IN LBS.

| | |
|--|------------------------|
| Chassis with superstructure, dry (without spare wheel and tools) | 2,380 lbs. (1,080 kg.) |
| Curb weight of vehicle (empty weight to DIN 70020)** | 2,557 lbs. (1,160 kg.) |
| Permissible total weight | 3,130 lbs. (1,420 kg.) |
| Payload | 573 lbs. (260 kg.) |

* The indicated engine output is available at the clutch for driving the car after deducting power losses due to power-absorbing accessories.

** Empty weight—ready to drive with fuel, spare wheel and tools.

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The sports model of the year!



Commander Regal V-8—one of a thrilling trio of Studebaker hard-tops that include style-setting President V-8 and Champion team-mates

Outstanding in spine-tingling getaway!

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Styled by Studebaker for Americans with a liking for distinction! This is the roomiest sports model of its type—superbly suitable for all your driving—a low-swung Studebaker hard-top or coupe.

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But your most delightful surprise comes when you drive one of these new Studebaker

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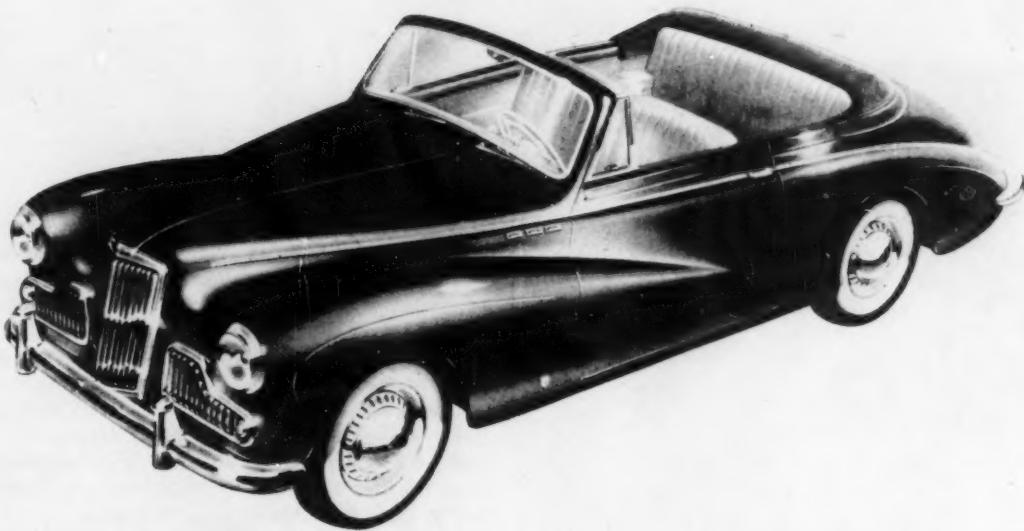
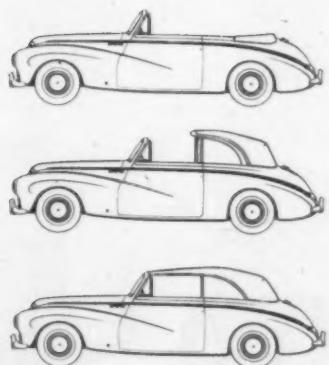
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Two great V-8s and a spirited 6 to suit your preference! Studebaker's low-level competitive prices to make your investment surprisingly small!

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Drive your new Sunbeam with top up, top down, or halfway, in the fashionable coupe de ville manner. The Sunbeam is geared for sports car acceleration and power — plus a gas and oil economy a family man can appreciate. Look at the sleek, low-slung sports car lines—and then at the roomy, comfortable sedan-type seats, with a traveler's size trunk, besides.

Priced at \$2,899*, the Sunbeam Sports Convertible is so convertible it meets your particular mood—or that of the weather—all through the year.

See it at your nearest dealer or write for catalog. The Sunbeam is a Rootes car. Rootes—most complete of all imported car lines—starting at \$1,445* with the Hillman Husky.

*F.O.B. Nearest Coastal Port of Entry. Whitewall tires optional extra.

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Gentlemen:

Please send me:

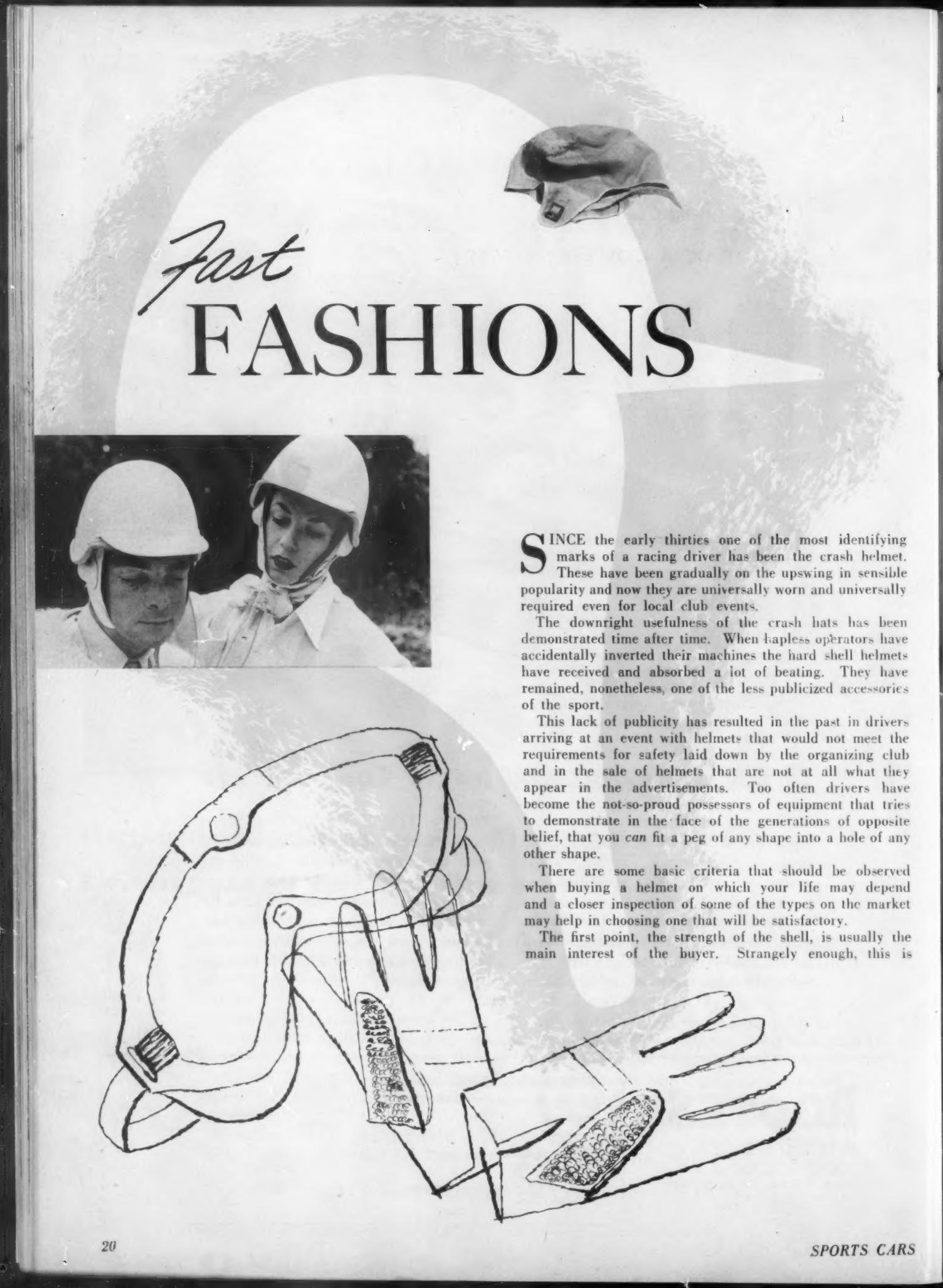
Name and address of my nearest
Hillman dealer
 Full details of the Rootes Overseas
Delivery Plan

NAME _____

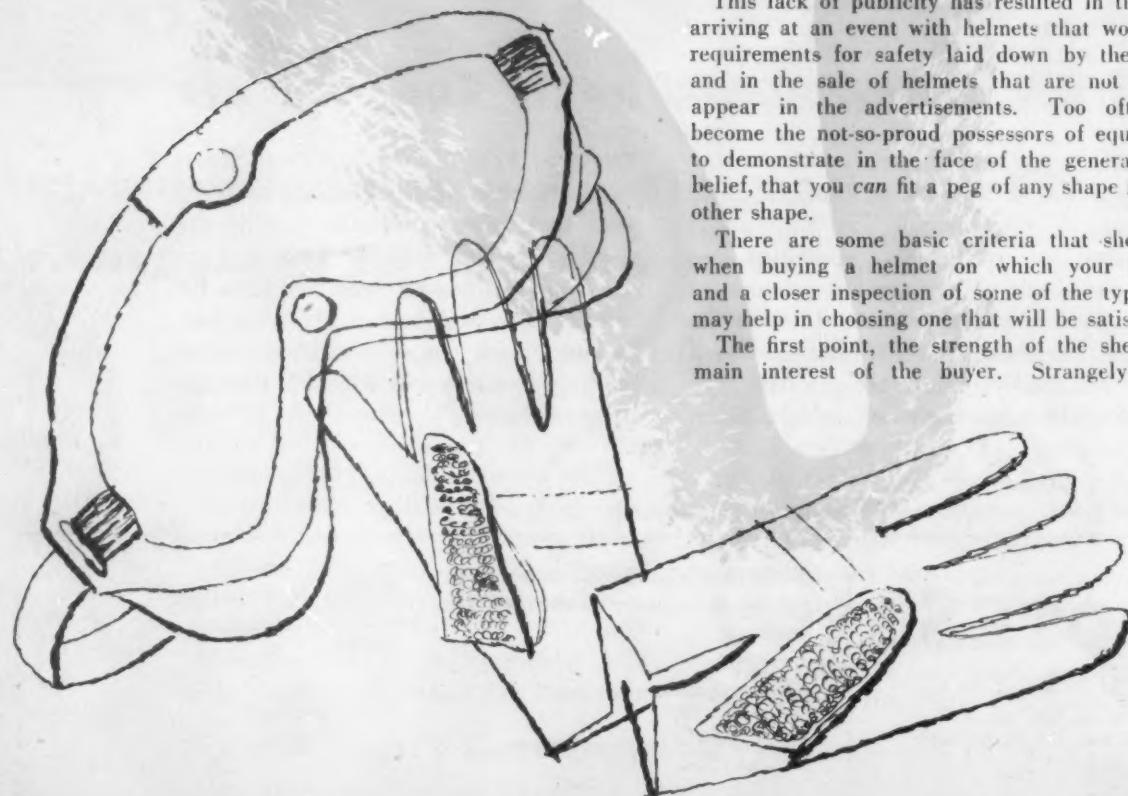
ADDRESS _____

CITY _____

STATE _____



Fast FASHIONS



SINCE the early thirties one of the most identifying marks of a racing driver has been the crash helmet. These have been gradually on the upswing in sensible popularity and now they are universally worn and universally required even for local club events.

The downright usefulness of the crash hats has been demonstrated time after time. When hapless operators have accidentally inverted their machines the hard shell helmets have received and absorbed a lot of beating. They have remained, nonetheless, one of the less publicized accessories of the sport.

This lack of publicity has resulted in the past in drivers arriving at an event with helmets that would not meet the requirements for safety laid down by the organizing club and in the sale of helmets that are not at all what they appear in the advertisements. Too often drivers have become the not-so-proud possessors of equipment that tries to demonstrate in the face of the generations of opposite belief, that you *can* fit a peg of any shape into a hole of any other shape.

There are some basic criteria that should be observed when buying a helmet on which your life may depend and a closer inspection of some of the types on the market may help in choosing one that will be satisfactory.

The first point, the strength of the shell, is usually the main interest of the buyer. Strangely enough, this is

Although these examples graphically show the durability and toughness of the shell, this feature is secondary to comfort.



Kangol



Clymer



Cromwell 122



Scottop



U. S. Air Force



Cromwell-Seagraves



probably the least important feature in the reputable brands today. Every approved racing helmet that we have seen has sufficient shell strength to withstand blows up to a point when, quite frankly, it wouldn't make any difference whether the shell collapsed or not. Concussion of this magnitude is rare in the sport, thank goodness, so you can be pretty certain that the helmet of your choice is safe on that score.

The really important point in a helmet is its comfort. A few hours in the hot sun in one that doesn't fit properly and you're sorry you have undertaken the whole business in the first place. The points to scrutinize here are the interior harness straps and the chin and neck pieces. The interior straps should be adjustable, and fit in such a way that you have no actual contact with the shell other than at the sweat band. Even there, the band should be held away from the shock-receiving (and transmitting) outer surface. A collapsible foam rubber support seems to be the standard approach and works very well. The neck straps should support the helmet in one fixed position on the head. A hat that wobbles or slips back and forth can be aggravating at the wrong time and if there isn't sufficient grip around the nape of the neck, the chin strap can be lethal in some instances. Another point to consider is the accommodation made for the driver's ears. Almost all drivers boast hearing equipment, a point overlooked

The Clymer helmet is made in France and has been in use since the early 1930s. Its construction consists of a duraluminum outer shell on a heavy cork second shell, thick sponge rubber and a leather lining. The helmet is also ventilated to allow air circulation within the shell. Since the helmet is patterned on the Seagrave style it is equipped with a flexible leather visor as well as shielded ear vents at either side. It is surprisingly light.

apparently by some of the hatters to the racing crowd.

It is necessary to hear something of what is going on with the car. There are times, obviously, when a driver finds himself too busy with other things, like watching the road, to give full attention to the instrument panel. At the same time, the slipstream of an open car at speed can pretty well blot out most of the sounds from the engine and practically all of them from below or behind the driver.

This is one point that the Seagraves-type helmets have over the new "jet" types. They are fitted with earflaps to deflect the air stream from the wearer's ears which allows him to hear some of what's going on.

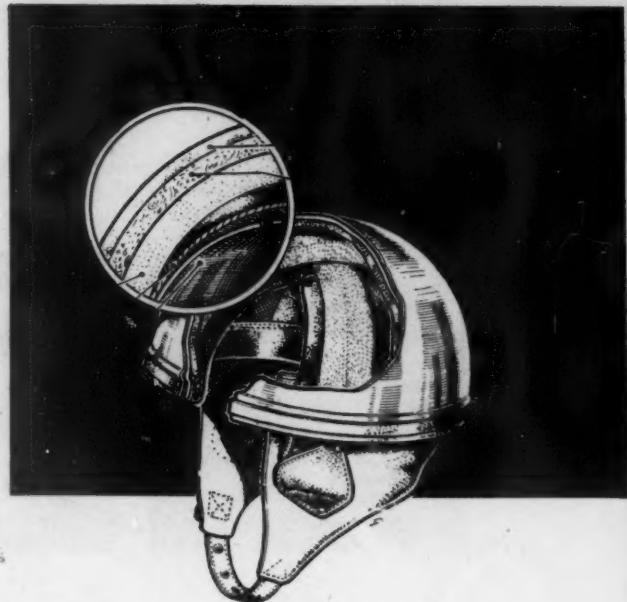
Another item to consider in purchasing a helmet is the cost. Usually the better helmets range from \$24 to \$36. This is a fairly tight price range, and the quality of the competing headgear is substantially the same. On the other hand, there are surplus Navy and Air Force helmets offered for sale from time to time at real bargain prices. While they may not have the visual appeal of the other hats, they will keep you from fracturing your skull if the need arises.

Many of the companies offer a choice of prices. Cromwell is an example of this practice. The pioneer manufacturer of racing headgear markets hats that cover the entire price range. Here the difference is almost entirely dependent on the outside finish. There are no substantial revisions in the construction of the shell and only superficial changes in the webbing and harness construction.

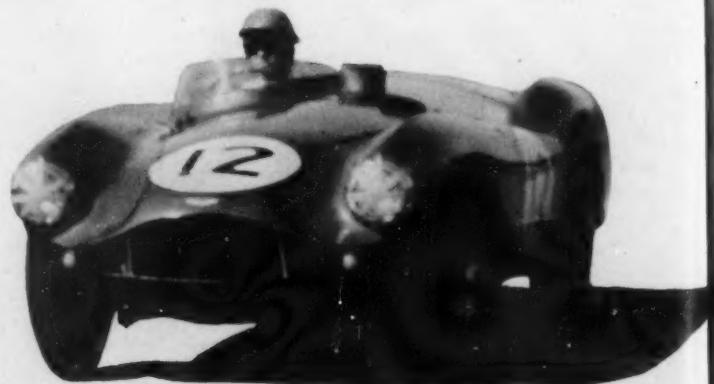
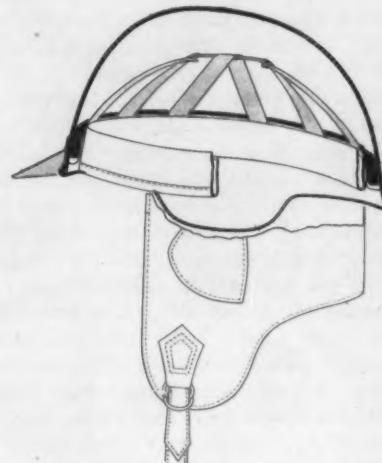
As to precautions, some of the helmets have rigid shells at the nape of the neck. This rigid band can, under certain conditions, cause more damage than it can prevent. Also, there are some types that will not work satisfactorily with goggles or visors not specifically matched to the brand. Those we have chosen for this article are, in our opinion, the most satisfactory, from one standpoint or another, and we feel that you can trust any of them—literally with your life.



Since the war crash helmets have been chosen as well as required for all automobile racing.



Details of the extra-light Kangol illustrate its individualistic shape and construction.





The Car That "Swept the Field" at Daytona...

CHRYSLER 300

It's the most breathtaking car to drive you've ever known! You'll be off and away in this brilliant new low-slung beauty to the throaty roar of 300 hp—the greatest, safest power in any American car. You'll feel the same thrill that today's most avid sports-car enthusiasts enjoy... the same light-handed, light-footed control and ground-gripping security.

In a Chrysler 300 you can enjoy the same flashing performance that won 1st and 2nd places in the 1955 NASCAR

Daytona Beach "Flying Mile," at speeds over 130 mph—plus the safe maneuverability and endurance that swept 1st and 2nd places in the 160-mile Grand National stock car race. For the sleek and stunning new CHRYSLER 300... in regular, though limited production... has the same road-hugging look, feel, and safety that have made the Chrysler name famous in the world's greatest road races.

Arrange for a drive today... your Chrysler Dealer is the man to see!

AMERICA'S MOST POWERFUL STOCK CAR

Brake HP: 300 @ 5200 rpm... Comp. Ratio: 8.5 to 1... Two 4-barrel carburetors... Special suspension for maximum cornering, road-hugging performance and control... PowerFlite Automatic Transmission... Power Brakes... Dual exhaust system... Wheelbase: 126 inches... Over-all length: 219 inches... Height: 58.6 inches.

See Your Chrysler-Plymouth Dealer

ILLUSTRATED—AUGUST 1955

FOR the past few years the pronged trident has been a bit in the background of sports car racing. The Ferraris moved into the lead in the big cars and the fabulous OSCA (built, incidentally, by the Maserati brothers, who are no longer with the firm that bears their name) gobbled up the silver in the smaller classes. Even in the two-liter class, where the Maserati was practically unchallenged, it didn't manage to create a lasting impression. Now, however, almost simultaneously with the forming of the Maserati Corporation of America, a new and *really* fierce piece of competition machinery is making a stir in the very active class D competition.

Introduced by Bill Spear at Sebring, the new car was proved a definite potential winner in its class and, as far as the crowd was concerned, was the highpoint of the race. The cars (only two of them were entered) ran faultlessly for the full twelve hours, turned in the fastest overall lap and continually screamed around the circuit at near record speeds for the last five hours. Everyone kept waiting for the next one around the bend.

There are more reasons for this fantastic performance than just the high power-to-weight ratio. The cars have built-in reliability and handling qualities that are a revelation in the field of fast machinery. The first, and probably the most important, specification is the balance of the whole car. The 1,850 pounds are distributed 925 front, 925 rear! This sort of weight distribution makes the mount behave as though it is actually a part of the driver and, as a truly high performance sports car should, it acts like an extension of the driver's body and not a disconnected collection of nuts and bolts that have to be forced to behave. The car practically corners itself.

Most such high potency machines tend to wander a bit under heavy torque and the application of the go pedal. This trait seems to be entirely lacking in the new three-liter bomb.

The cockpit is starkly functional, and those enthusiasts who demand rugs and refinements will not be pleased with the aluminum finish, arrived at by simply leaving the structure exposed. The seats, on the other hand, are as comfortable as they are light and add to the feeling of unity with the car. The gearshift lever is close to the driver's leg and the gate-type floor plate makes mistakes, if not impossible, at least difficult. There is a bit of spring in the linkage to the rear-mounted gear box, and it could give a little uncertainty to the feel of things until the driver became accustomed to it. The instrument panel (not disguised to resemble a juke box) is just that and extremely easy to read.

The brakes also are what one would expect from such a car. The large, 15-inch diameter drums will clamp on with as much vigor as the car has in the go department. The balance keeps the strain of even heavy braking from being too apparent.

the
new
maserati —
light



Bill Spear blasting through the esses at Sebring in the Maserati's maiden race.



The Maserati's starkly functional instrument panel is more easily read at high speeds than the fancier variety used on passenger cars.

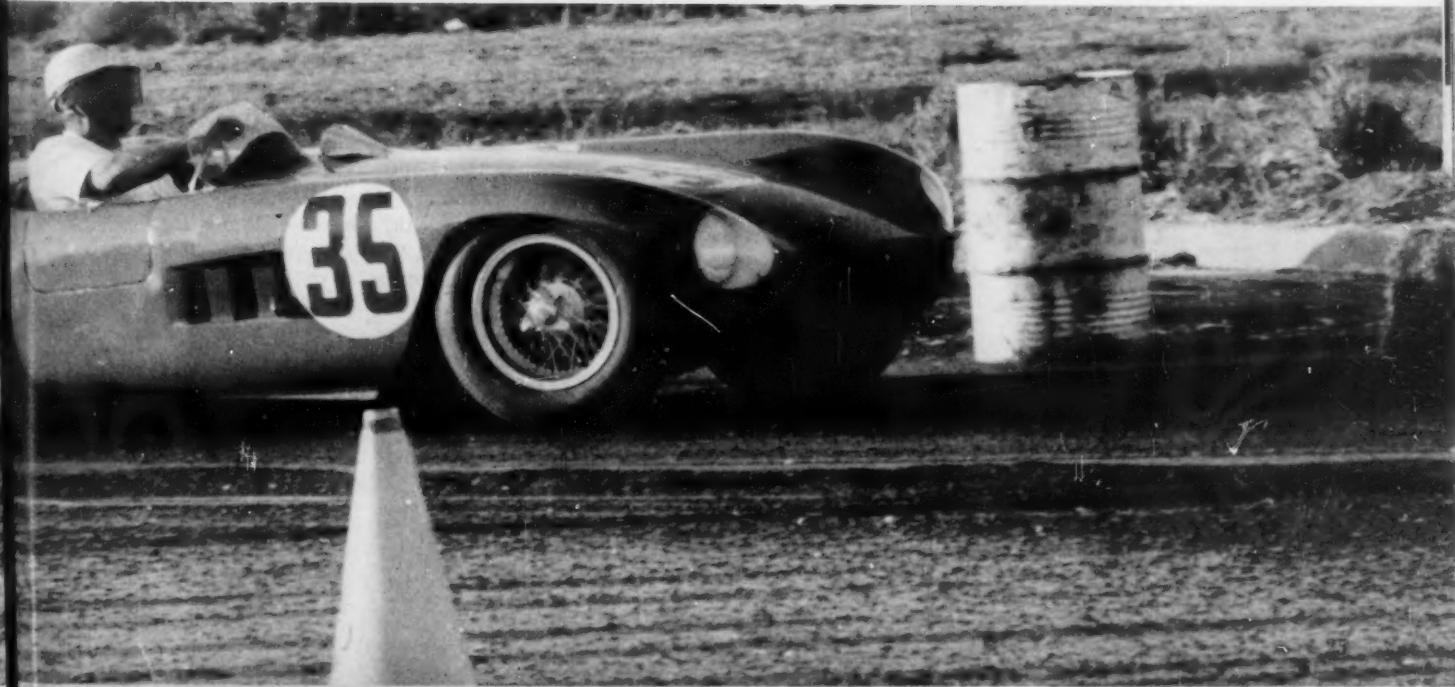
Spare tire, battery, gas and oil tanks leave no room for luggage.



The most accustomed view of Bill Spear's 3 liter Maserati. The slits flanking the license are for brake cooling.

From any angle the international sports body on the Maserati is an example of functional and attractive design.

L i g h t n i n g





Stripped of all but the essentials the Maserati cockpit is a thing of beauty only to the most rabid enthusiast. Note ultra-light body paneling.

MASERATI 3-LITER SPECIFICATIONS

| | | | |
|-------------------|--|---------------|----------|
| Weight | 1,850 lbs. | Wheels | 15. in. |
| Wheelbase | 2,210 mm. | Tires, front | 600 X 16 |
| Track, front | 1,300 mm. | Tires, rear | 650 X 16 |
| Track, rear | 1,250 mm. | Fuel capacity | 150 l. |
| Clearance | 100 mm. | Oil capacity | 15 l. |
| Transmission | 4 forward, 1 reverse | | |
| Suspension, front | Independent, parallelogram. | | |
| Suspension, rear | De Dion, transverse leaf. | | |
| Engine | Six cylinder in line. | | |
| Ignition | Dual magnetos. | | |
| Carburetion | Three Weber, DC3. | | |
| Oiling | 2 feed pumps, 1 scavenge pump, oil radiator. | | |
| BHP | 270 at 6,500 rpm. | | |
| Compression ratio | 8.75 to 1. | | |
| Maximum speed | 165 mph. | | |
| Price | \$13,730 F.O.B. New York, incl. taxes. | | |
| Distributor | The Momo Corporation 39-49 55th Street, Woodside, N. Y. | | |



With the grill removed, the extra large radiator, oil cooler and ducts for front brake cooling are visible. The nicks are souvenirs of Sebring.



Of course, the body is typical of the Maserati competition coachwork—a thin aluminum skin stretched over small diameter tubing. The design, while seemingly massive, is one of the most pleasing we've seen.

In short, if the car remains as fierce and reliable throughout the season as on its debut, this year's class D activity should be much more than a little interesting.

to be, or not to be...



Styled by Ghia of Italy and looking every inch a fine sports car, the DeSoto Adventurer II belies its appearance. A "dream car"—yes; a sports car—no. The Adventurer was designed and built by Chrysler to provide its stylists with "ideas" for future production models of stock cars. More proof that wire wheels and the Italian look do not a sports car make.

Strictly American in styling, the Ford Thunderbird seems to be something of a hybrid living in limbo between the world of sports cars and that of stock models. Someday, perhaps, the little car will find a niche of its own as a "personal" automobile.





Aristocratic in body
and with a rugged
powerplant, the
MG represents the
epitome of sports cars.
While the Adventurer
has no price tag, the
\$4,000 Thunderbird
outranks the MG
in only one
department—price!

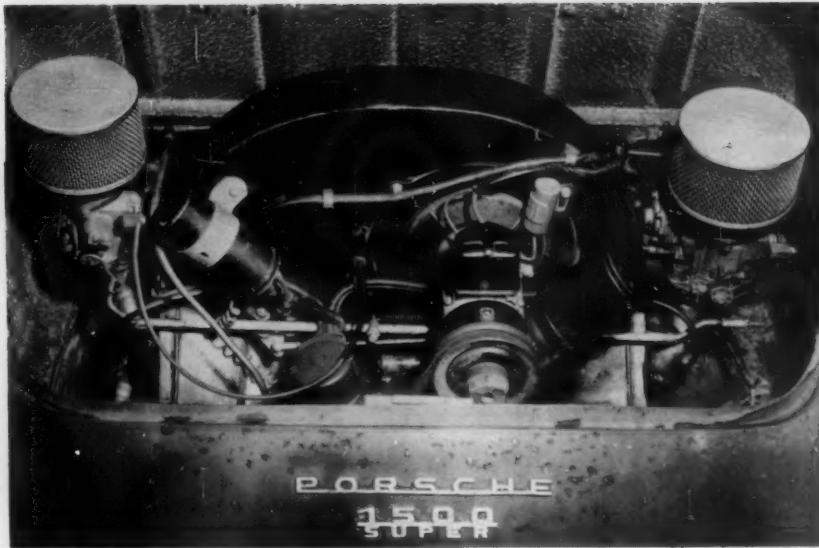
Another British sports car of
unchallenged superiority
over American attempts to produce
similar vehicles, the Austin-Healey
holds its own against all comers.

That is the question . . . can
America build a true sports car?





PORSCHE



Porsche power plant is one of the world's most efficient air-cooled auto engines. Problems with tuning arise mainly from its individual and unusual design.

OF ALL the strange and wonderful things that man has wrought the Porsche is probably one of the most talked about among the motoring aficionados. The car has from the very first captured the imagination of the enthusiasts and has made both friends and enemies among the sports car addicts. In splitting those who know sports cars into two groups, it has achieved no middle ground. No, indeed. You either like Porsches well enough to own one, and probably nothing else, or you dislike them enough to "never touch one."

All through the fraternity there runs one cry from both owners and non-owners . . . "Should my (or that) car sound like that?" Here the answer is probably yes. The Porsche has a note all its own, as distinctive as a Ferrari and, in its class at least, as menacing. The biggest problem seems to be keeping the note as it should be for your car and we might as well face it now—no two Porsches are alike, and no two cars require the same technique to extract the best from them.

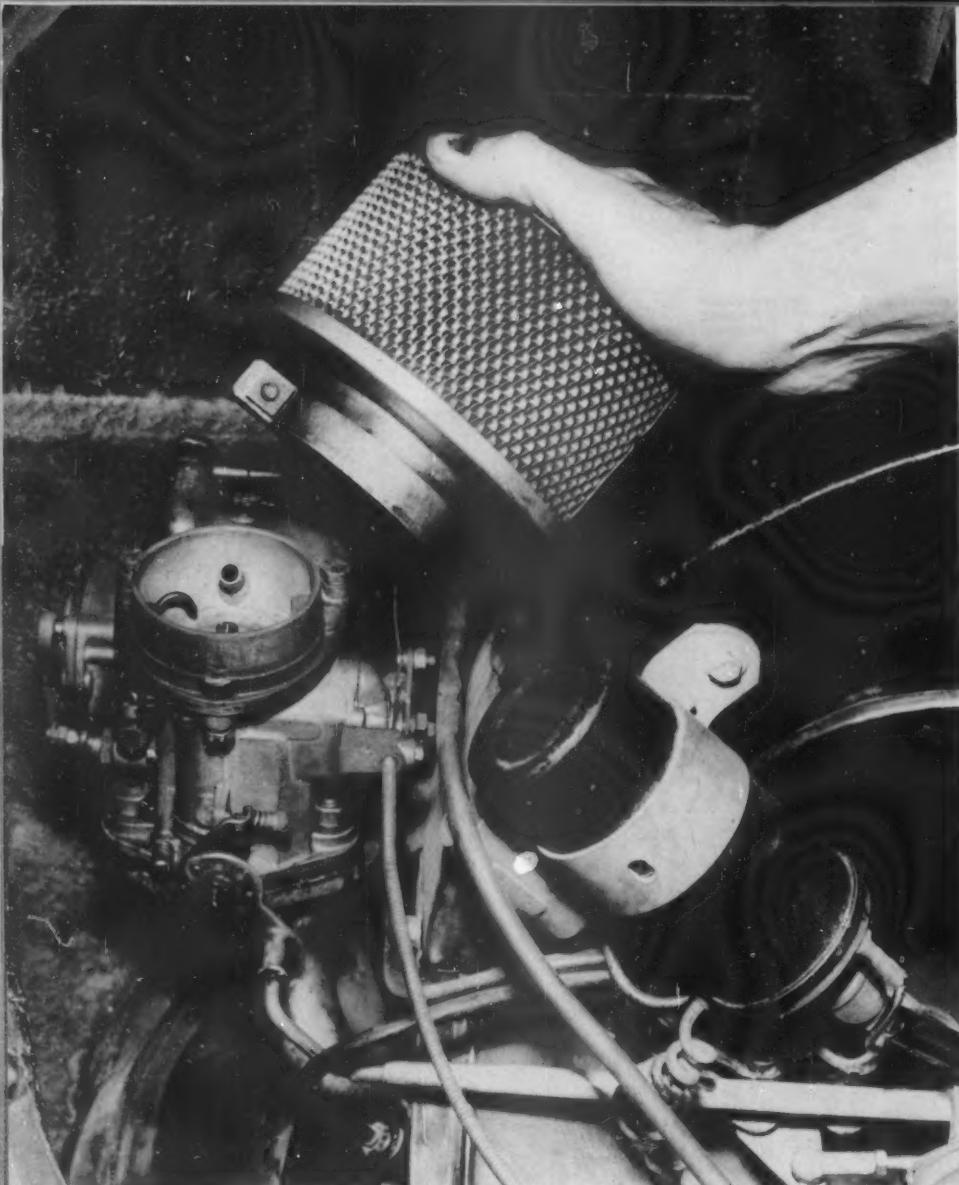
On the other hand, the almost total lack of information on tuning the cars seems to have hit, at least once, every owner in the country. There are shop manuals, and articles that deal with the Porsche, as per specifications, and there just isn't, as far as we know, a Porsche that fits these specs except in their most general terms. This is not a complaint, far from it, in fact one of the reasons that the mark has endeared itself to owners is that the cars are individuals *but* it does make for problems when you want to tune the car for racing.

There are a lot of things that the cars have in common and these are the real backbone of racing. This article is based on racing, although the discussion could well pertain to any part of the sport: rallies, gymkhana, or just day-to-day driving.

Let's begin with the electrics. These are encased in small fuse blocks that have very slight resemblance to anything most Americans have ever encountered and even the fuses themselves are useless when it comes to decoding what the load on an individual circuit has been or should be. The little ceramic cigars with a strip of magnesium down the middle have code numbers on the back that are, I'm sure, undecipherable to most owners. Maybe the following will help. All the accessory fuses are 8/15 amperes except for the second from right and that is a 25/40 affair to keep the cigarette lighter going.

From the fuse box we work our way back to the distributor and this gadget can be a real headache! In the first place the cam in the distributor may not be square, i.e., the points may not open properly around the cam. Placing the distributor on a meter to assure that the faces are 90 degrees apart and reshaping them where necessary will help. From here you can go to the spark plugs. Generally F-80 KLG plugs gapped at about .024-inch work best but the Porsche engine seems to have slightly uneven heat distribution and you will probably find that different heat range plugs will have to be used in each cylinder. This is determined only by trial and error and the whole operation requires patience. It is well worth the time it takes as the engine will have considerably more life if the plugs are properly matched to the chamber's characteristics. For racing, of course, you should go to colder plugs and increase the gap to .027-inch. If you have, for instance, used F-80s all the way around, you should try F-100s for racing, or F-50s should change to F-80s and so forth. These are based on KLG heat ranges but the equivalent in any of the other well known plugs should be as satisfactory.

Along with the spark plugs, the ignition timing must



The Solex PBIC-40 carburetor can be fitted with a whole range of varied jets and venturis for performance under all eventualities.

be carefully adjusted. On the Porsche the static adjustment is determined by connecting a timing light across the points and with the number one cylinder at 11/32 for the America (13/32 for the Super) past top dead center the points should just open. Here the top dead center position is arrived at by setting the notch on the crankshaft pulley at the seam where the halves of the crankcase join. Then rotate the pulley to the *left* the proper distance. The number one cylinder is indicated by a notch on the distributor case at four o'clock and when the rotor points toward it, the cylinder is in position.

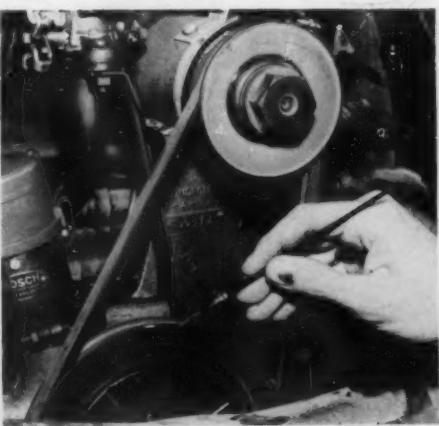
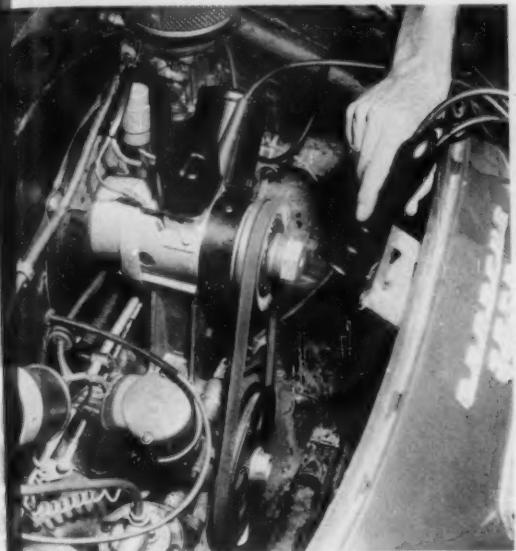
To simplify the setting, it is advisable to paint a small mark on the pulley to the right of the notch and use the painted mark for the adjustment. The contact point gap should be .016-inch and the cam dwell should be 46 degrees. For racing, the timing should be advanced about 1/16 of an inch and the automatic advance checked with a timing light to be sure that it gives 2 degrees at 600 rpm., 13 degrees at 1,400 rpm. and 30 degrees at 2,800 rpm. The throw weight springs can be stretched or compressed slightly to assure that the advance conforms to these figures.

The next step is adjusting the tappets. On the Porsche

this isn't as difficult as it first appears. If the back of the car is jacked up, the job can be done in pretty short order. To adjust the tappets cold, the engine should be set at the number one cylinder's TDC as though the timing were being set and the number one cylinder tappets (the front right facing the rear of the car) brought to the proper gap. The pulley should then be rotated 180 degrees and the number four tappets (those at the left rear) set. Follow the same procedure for the number three cylinder (left front) then the number two (right rear) and the valves are finished. To be sure they are in the proper condition for racing, the arc of the rocker should be checked while the covers are off. By rotating the engine and watching the movement, the rocker can be checked and should be at 90 degrees to the pushrod when the spring is compressed halfway.

From here on the carburetors are the biggest problem in achieving performance from the Porsche. The PBIC-40 Solex instruments on the car are sensitive and require considerable adjusting and attention. In the first place they are subject to the slightest changes in temperature and humidity. The adjustment will have to be made *on the*

A small timing light is necessary to check both spark advance and static setting.



Painting an extra mark to the right of the pulley notch will facilitate race tuning.

course the day the race is being run. There is very little point in trying to set the car up at one point and move to another climate to race it without changing the settings and probably the jets as well.

In fact, it is a practical idea to provide yourself with a collection of jets that will allow you enough leeway to experiment with the instruments at the race. The jets supplied with the super are a 0107.5 mm main jet and an 85 mm accelerator pump jet. The basic setting for racing should be richer on these two, about 0117.5 for the main jet and 110 for the accelerator pump. You will have to try the car on the course and after examining the plugs determine whether or not the main jet is properly sized. The accelerator pump jet on the other hand will have to be determined by accelerating the car from 3,000 rpm. upward. If the car hesitates under a heavy throttle the jet is too large. If on the other hand the car backfires the jet is too small and should be fitted with one that gives a richer charge.

The correction jet will require full throttle runs to determine whether or not the mixture is rich or lean. This is another trial and error method of settling on the proper carburetion and there is noting to do but experiment again and again until the optimum is reached. This will usually be pretty obvious to the ear as well as at the wheels, because by now the car should be booming along at its happiest. As a guide though, if the mixture is too lean (as read from the plugs after a full throttle run) you should install a smaller correction jet, and conversely a larger one should go into the carb if the mixture is too rich.

This is about the extent of the preparation on the engine. It consists mostly of doing everything the manual recommends but doing it more thoroughly than you would normally. The body offers some leeway for changes that are quite proper under the FIA and SCCA rules.

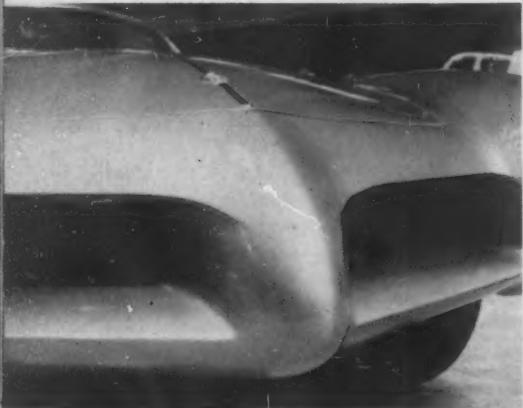
First, in spite of the car's extreme roadworthiness, the rear engine placement has some inherent differences from those usually encountered in high performance cars. In the first place the rear end "hunts" rather like the front end of the MG. If you get the Porsche airborne the chances that it will swerve when it hits the ground are pretty certain. Then too, for some types of courses the rear end will not be as stable as it should be. This can be remedied by lowering the car on its torsion bars at the rear. This in turn will result in some rather strange and wonderful angles for the rear wheels but will also make the back end stick.

One final point is the temperature gauges. This wins or loses a lot of races. The thing is almost guaranteed to go over the normal operation level. You should remember that the oil recorded on the gauge is the oil after it has returned to the sump from the cylinders when it is at its hottest. The maximum temperature of 120 degrees centigrade therefore still leaves some leeway for heavy operation. In the short sprint races that are the usual rule here in the States, the car can usually be considered safe if the needle just stays on the dial.

In short, under the most arduous conditions the car will hold together and under the most fantastic strain continue to perform like no other production car of the same displacement. There are the same problems connected with the tuning that you find on all gasoline engines and some peculiar to the Porsche. The final results and the overall go that can be had with a little patience are well worth the difficulty and time necessary.

—★—

The Alfa Romeo-based experimental car, designed by Bertone, combines some of the world's most unusual automotive shapes with true aerodynamic design that results in high performance.



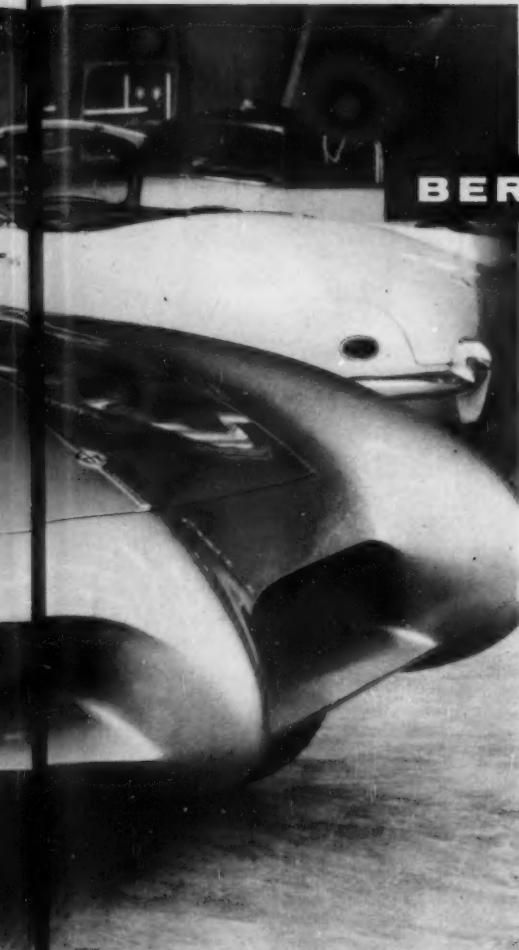
The concealed headlights retract into the cowling above the air intake.

the **BIG** *bat*

While not as spectacular from the front the car's extreme airflow is readily apparent and wind-cheating lines are exceptionally pleasing.



SPORTS CARS



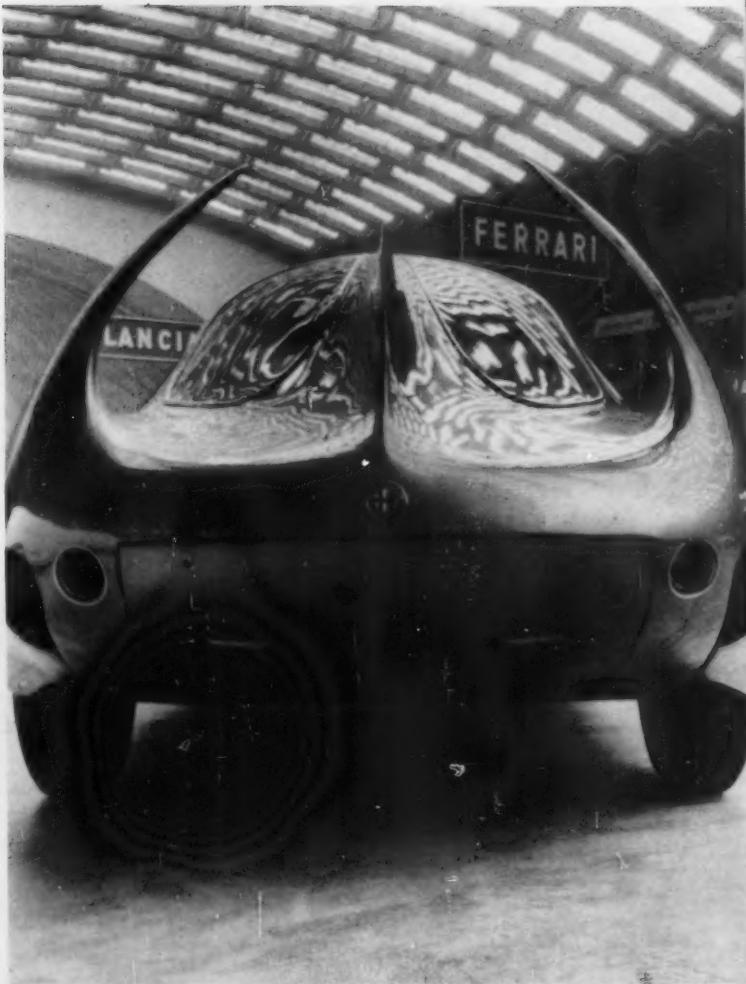
BERTONE

Scaglione-designed and Bertone-built, the Alfa BAT has attracted attention wherever it has been exhibited.



Overemphasis on the more curvaceous aspect of the Bertone Alfa divorces the automobile completely from standard practice or thinking.

The projectile shape is much emphasized from this angle.



H eroine

d r i v e r

Blonde Jackie Evans was the first woman to compete in Pan-Am race.



At a later race Brownette Jackie signs autographs for admiring Mexican kids. Note Piloto band.



Now a dark Brunette, Jackie inks her entry form for the fourth running of the Mexican Classic.

NOT exactly in the tradition of Al Coppel, consider a "heroine driver." Leave us take the case of one Jacqueline "Jackie" Evans, a sometimes blonde, sometimes brunette bundle from Britain. Jackie tried the Pan-American Road Race several times. Finished twice.

Back in 1950, Jackie's movie career was going a little badly. In fact, it had blown a gasket. So our Jackie conceived the idea of entering the Pan-Am race despite the fact that women were vigorously barred therefrom. But Jackie was a blonde at the time and she was living in Mexico City. So she opened her little black book.

In due time, chief organizer Enrique Martin Moreno was besieged by so many Mexican politicians he thought he was running for office. Finally he gave in and Jackie's "heroine" career opened.

Her qualifications were impressive. She had been refused a driving permit in Great Britain and even had a difficult time convincing the more lenient Mexican officials that she could cope with city driving regulations. But she did have a license.

In this race, to quote a friendly Mexican journalist, "Jackie drove her own car without a co-pilot, sponsor, money or friends." Oh, these romantic Latins!

By skillfully pushing down the accelerator pedal on the Chrysler in the straightaways and slowing to a crawl on the turns Jackie managed to finish. In 45th place.

We now fade to 1951. This time Jackie finished again, in 26th position. Nobody has ever explained that!

A delightful sidelight on this contest was a feud between Jackie and Andrea Gonzalez, another woman driver. Through a mixup Andrea was temporarily disqualified. The disqualification was lifted and Andrea took off after Jackie who had a long head start.

Andrea caught Jackie all right. But get this bit of reasoning. When Andrea signaled for right of way to pass, Jackie wouldn't move over, "because I thought she was disqualified and was just continuing for the fun of it."

Needless to say, Andrea was a more than slightly vexed girl at the lap finish line.

Jackie's luck held. In the final lap Andrea's engine overheated and Jackie, at least, beat out the only other woman driver in the event.

Just lately, Jackie has varied the routine with a couple of "suicide" tries, which she heatedly denies but which resulted in a gratifying amount of publicity.

She has since announced that she's "got religion" and is determined to race again in the Pan-Am event. What a boost for the cause of women competition drivers!

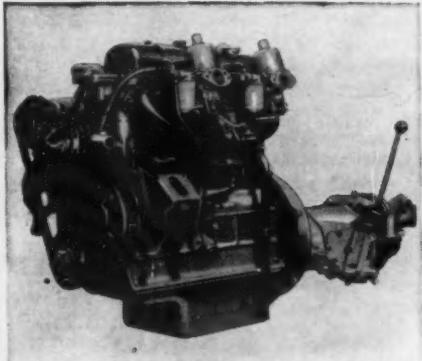




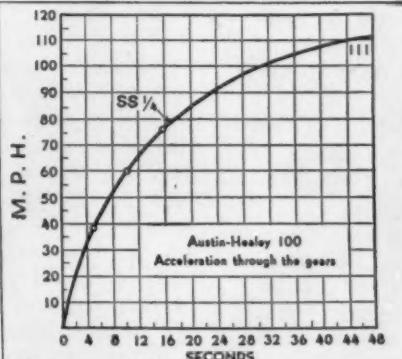
IN 10.5 SECONDS

The Austin-Healey '100' offers you today's outstanding combination of performance and value. For less than \$3,000 you get light, precise steering, pool-table flat cornering and stable four-footed roadability. These advantages plus an excellent weight-to-power ratio enable the Austin-Healey '100' to dominate Class D cars and many larger.

**\$
ONLY 2985
FULLY EQUIPPED**



The Austin-Healey's competition-tested engine develops its maximum torque at a modest 2,000 rpm for top acceleration through the gears. And not only is the engine reliable but it's easy to maintain too, with parts (including a modification kit) quickly available from 14 Austin distributors and 350 dealers.



Specifications at a glance: Four cylinder, overhead valve engine; displacement—2660 cc; 90 bhp at 4000 rpm; wheel base—90 inches; curb weight 2150 lbs.; distribution 49% / 51%; three forward speeds plus overdrive (synchromesh); steering 2½ turns lock to lock; brake area 145 square inches; average fuel consumption, 25 mpg.



Because braking is as important as acceleration, the Austin-Healey '100' is muscled with 11-inch, hydraulic brakes that provide positive, no-fade deceleration. On top of all this the car comes equipped with custom features like overdrive, heater, tachometer, twin carburetors and knock-on wire wheels at no extra cost. For more details, use coupon below.

Austin-Healey
100


AUSTIN of England
27-29 West 57th Street, New York, N. Y.

GENTLEMEN:

Please send me a copy of your new 12 page, full color brochure on the Austin-Healey '100'.

PRINT NAME AND ADDRESS HERE

Out to Lunge

By JIM MOURNING

FOR the sports car enthusiast there is an ever expanding list of contests requiring skill and daring—rallies, hill climbs, time trials, road races and the like. To this list can now be added the sport of Lunging.

The game was only recently discovered by a Bugatti fanatic named Ivan L. Crashbox of East Granby, Connecticut, but it already has a staunch and growing band of followers.

On a Saturday afternoon some weeks ago, Ivan was tooling gaily down the street, endeavoring to fill his weekly quota of pedestrians and thinking little of competition, when a common situation developed. Reaching an intersection where the importance of the intersecting streets necessitated boulevard stop signs on all four corners, he noticed that his arrival coincided precisely with that of a car on the cross street. Since their simultaneous arrival generated a certain amount of confusion over who had the right-of-way, the result was an embarrassed, somewhat wary impasse. Then the other car began to inch forward. Feeling irritated at the pettiness of city officials who put signs where they'd impede his progress, Ivan took it out on the other driver by popping his clutch and lunging forward. The other car slammed to a stop. So did Ivan's. This maneuvering went on for several moments, with neither car gaining the upper hand.

Finally, when the other driver began groping around the floor of the car for what he assumed was a tire iron, Ivan gave in and the other sped off with a nasty snort of his exhaust.

Now, to a less imaginative mind, this would have been an irritating incident and nothing more. But to the alert brain of Ivan Crashbox of East Granby, Connecticut, it suggested untold possibilities. After a few miles of meditating on these possibilities, Ivan deliberately maneuvered himself into the same position. He has been doing it ever since.

Because of the rapidity with which this sport has spread through his circle of friends, Ivan has written a handbook called "The Fundamentals of Lunging and How They Grew." The following are excerpts from that work.

OPPONENTS: After competing with all sorts of drivers under varying conditions, I found that two types of individuals can be ruled out for all but the greenest novice. These are women drivers and Bentley owners. The women seem to lack the stamina and will usually give up after one or two lunges. This cannot be considered a real challenge, since it does not thoroughly test the mettle of the participants. Bentley owners do not seem to catch the spirit of the sport, considering it somewhat beneath their dignity, and their lack of enthusiasm spoils the test.

With a little practice, the accomplished Lunger can gauge, almost to the instant, when his opponent is weakening. This can usually be detected by a flushed complexion, a quivering lip and a sudden fondness for loud conversation that often contains questions concerning the legality of your birth, reflections on your parentage and suggestions on where your eventual destination should be. If your opponent should become violent, it is best to abandon the contest as he is a bad sport and not the type of person to be associated with, even in a test of skill.

SCORING: The object, of course, is to see how high the score can be run up before the opposition gives in. Six to



eight lunges can be considered a good average, but a particularly tough and obstinate opponent will often permit you to rack up a score of ten or better. Permitting the opposition to gain the right-of-way will result in a penalty of five lunges. The National Lunging record is currently held by a Pismo Beach, California, driver who pitted his TC against a taxi driver who had just received a nickle tip and ran up the astounding score of 18!

Chances of record breaking scores can be increased by careful attention to the time and place of the encounters. The best time of day is late afternoon, when streets and highways are filled with fussing, impatient drivers with a tendency to be sullen and bullheaded about traffic. If the day is overwhelmingly hot, so much the better. Best place is a residential area, where the eager driver may be only moments from home and in no mood to tolerate last minute delays.

RULES AND REGULATIONS: There are, naturally, certain regulations which must be observed if the event is to remain on a sporting plane. For instance, faking out of position by signalling him to go ahead is not to be tolerated. A gesture of this type is a signal of defeat and any attempt to win by using it can only be considered sneaky and underhanded, putting you in the same class as stoplight-crawlers. There should be no facial contortions designed to irritate the other driver, no vocal expressions of a personal nature and no unseemly exhaust noises. The true sportsman can win by skill and daring alone.

And there you have it. Some of the basic fundamentals of motoring's newest sport. Develop your own refinements, establish your own local rules and have an enjoyable week of Lunging.

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SPORTS CARS

UNTIL this last May 15th the mushroom was the standard example of fast growth. This has been superseded by the races at Cumberland, Maryland, and if this year was any indication, the other business about great oaks and little acorns may well go by the board after next year's running of the event.

It is doubtful that anyone who huddled in the rain two years ago foresaw the 48,000 general admission spectators, let alone the 283 official entries for the 1955 event. But there they were, to make the race the largest event yet held on the east coast, and probably one of the most successful from a control standpoint ever held anywhere.

True to form for such events the preparations for the race began with rain that turned the technical inspection and drivers' school into a pretty mushy affair and tried, vainly, to dampen the spirits of the entrants. By Saturday afternoon most of the rain had abated and the infield dried to a mere swamp making foot travel possible, if not practical. The cars were marshalled on the runways not used as part of the circuit however, and the business of learning the course went off smoothly, while service trucks spread cinders over the more bottomless pits.

As usual, some of the finest racing was done unofficially during the limbering up period and Bill Spear and Jim Kimberly had quite a time during the late afternoon session.

Race day dawned bright and early, with the expanded schedule calling for the first race to begin at 8:30 a.m. And, lo and behold, it did begin on time, as did all of the races during the day, making this meeting unique among such events. Considering the number of races and entrants, our heartiest congratulations go to the officials.

The first race, for production MGs piloted by junior drivers (drivers that have never placed higher than third in an event) again brought out the fact that the Abingdon product is about as tough a little car as has ever been built anywhere. The first two laps were a jumble of fierce battles for every corner, with the usual spins, near spins, and complete shuffling of positions. By the fourth lap though, L. K. Cracraft had moved into first spot with the MG TF 1500, and on the next lap Nick Ryder, happily puffing on the ever present pipe, moved into second spot and began needling the leading car. Foxy Carter took over third on the eighth lap, and held it without a challenge.

Farther back, in sixth position, the first of the class G cars were happily exchanging places from time to time. Both Frank Baptista and George Valentine in MG TCs had a go at leading their class, and the cars were never more than a length apart from the eighth lap on. Third spot in class G went to H. E. Carter, with all three class G cars well up among the class F machines.

On the next to the last lap Ryder poured a bit more on in the turns and went into the lead but when the flag dropped it was Cracraft back in the front spot to finish one of the hardest fought races of the day. As usual the enthusiasm of the newer drivers and the numerous entries (twenty-nine finished) resulted in a real bang-up opener.

The second race, starting on schedule again, brought out the modified and production cars up to 2 liters. This was a real walkaway for Christianson in the Porsche 550. The first lap saw him bearing down on the leading OSCA driven by J. R. Johnston. In fact, the bearing down was so fierce that the OSCA spun, giving up eighteen positions and the Porsche spread its lead to almost a lap over the second place Arnolt Bristol driven by Raymond Cuomo.

The OSCA began moving up steadily through the pack and, in spite of its lost time, was firmly in third spot by the tenth lap, and stayed there to the finish, after displacing the AC Ace driven by Bojalad.

All through the race the Valedes-Dapena Porsche SS and the Denzel driven by Toland went at it hammer and

Mountain mushroom grows at Cumberland



A. R. Simmons lifts the rear wheel on the 300 SL while pushing it a bit on the hairpin in the eighth race.



Rubini and Andre circulated for the entire thirty minutes of race seven as though their cars were tied together.

T. A. Freedman accelerating in the Maserati.



Sherwood Johnston and Ferrari, a potent combination.

tongs with the Denzel easily taking class G. Other sidelights were the amazing performance (as usual) of the Suzy Dietrich supercharged TC combination. She moved from ninth on the first lap to fourth by the fifth and maintained that position until a short in the generator forced her out after about seventeen minutes of the half-hour race. Henry in the Kieft MG tossed a rod through the block to the accompaniment of billowing clouds of smoke and added considerably to the atmosphere of the competition.

The third race, again for junior drivers, brought out some senior machinery—two Ferraris, a Mercedes 300 SL a couple of Austin Healey 100 S models and a whole gaggle of production AH 100s. J. R. Schaeffer in Lyeth's familiar 2.9 Ferrari took over the lead in the first lap, and actually had lapped all but three other cars by the end of the race (passing Shakespeare's Ferrari three times in the twenty laps).

The second place cars, Vince Sardi in the 100 S and Hugus in the Mercedes, attained their positions early in the race and held them but the class battle between Kunz and Quackenbush in production Austin-Healeys kept things lively until the last few minutes when Kunz moved into a decisive lead and held it. George Borten held third spot in the modified category in spite of a spin on the second lap.

The final race for junior drivers in classes B and C brought out the Allards, Jaguars, a T-Bird and a Corvette to howl around the 1.9-mile circuit. And how they did,



Henry and the Kieft ran out of engine as well as course when a connecting rod holed the block.



J. R. Schaeffer in Lyeth's Ferrari turned in senior performance for a junior driver in third.

with all the drivers laying it on hot and heavy, showing some very finished driving.

The start saw the three Allards pull into the lead, with Saidel leading through the esses, building up a commanding margin down the first short straight, then revolving at the hard right turn to let McNaughton and Burtner into the lead. Apparently this wasn't Allard's day, since Burtner had a bit of control problem on the hairpin and dropped to twentieth place on the second lap. Bernie Lust whirly-gigged on the third lap and lost a few positions, to be emulated by Quartullo and the T-bird on the fourth. The fifth lap saw Saidel at it again and Burtner retired from the fray. The Jaguar contingent was ably represented as Peggy Wylie and Bob Kessler moved into second and third spots and began heckling each other and MacNaughton. The Corvette had moved into sixth spot from seventh, and sounded fierce until it retired on the sixth lap.

On the seventh go-round Peggy took over the lead for a couple of laps and MacNaughton dropped back to fifth until he retired on the twelfth lap. Kessler had the lead from the tenth to the finish.

Peggy went out briefly on the 17th lap, came back in, still in second, only to be black-flagged at the request of her husband because of missing tread on a rear tire. This let Norair and Carter into the second and third spots where they finished. The T-bird, incidentally, ran to the last, in just that position, doing away with all the contestants except for production class C.

A brief intermission, followed by the Ladies Race brought

things up to 11:45. Peggy Wylie, imitating Saidel in the preceding go, led through the esses and tried too hard at the first corner, whereupon Suzy Dietrich in the blown TC took over the lead and kept things going at an average speed of 63.4 mph. Peg Wylie recovered from the spin in eighth spot and pushed the C-type Jaguar back to second position by the sixth lap, where another brief rotation gave the second position to Evelyn Mull. This was rectified a lap later and Peg followed the flying TC across the finish line. Isabell Haskell drove her usual smooth race to take a second in the under-2000 cc. category with the diminutive class H machine. This feature of the Cumberland races was one of the most popular events on the program.

Race six brought out the senior drivers in production MGs and the tempo of the day began increasing by leaps and bounds, with J. E. Ryan and Dick Nash taking a commanding lead and dicing for the full half hour. The first two cars weren't the only attractions though. Durbin, who ran sixth or seventh for the first twelve laps, moved up in his own inimitable way, jumped to fourth overall in the 13th lap and third by the 16th. All the while, Steve Spitler and Bill Long had a bumper-to-bumper go at the turns and the only time they were separated by more than half a length was when Durbin wedged himself between them on the way by. The speed of the event is evidenced by the average for the first car at 61.5 mph.

The seventh race, for production class E and F cars excluding MGs, while actually a bit slower than the sixth

J. R. McCormick pushed A. R. Simmons relentlessly in the eighth race.



race was no less hotly contested, with a very strong Morgan contingent at work hammer and tongs for the half hour. The first lap saw Andre, Hebb, and Rubini (Morgans); Robinson (TR2) and Rothschild (Morgan) battling for the lead. By the second lap Robinson had dislodged Rubini, who retaliated by passing both Robinson and Hebb in the fifth circuit, to harry the leader. Robinson passed Hebb on the next lap and maintained, with no little effort his third spot for the remainder of the race. In the eighth lap things got shaken up a bit when McConkey (TR2) worked his way to fourth spot, spun and was replaced by Rothschild. Then the battle began in earnest. The two leading Morgans intent on their own private dual outdistanced the other cars while Rothschild and Robinson kept things on the ragged edge by hotly disputing the third position. The class F competition went rather smoothly. Paul Flickinger leading the class in the HRG until his retirement on lap 4 when Underwood, Lawrence and Lilley in Porches took hold, and remained in that order to the flag.

Race eight was a first for us, in that we saw the Mercedes 300 SL run the way we expected it to for the first time. Paul O'Shea took the silver car into the lead on the first lap, and was hardly in sight of the other entrants, except when he passed them on the second or third time around. All this in an almost eerie silence compared to the other machines on the course. While we're on the subject, Paul pointed up one of the cardinal rules of racing all too often ignored. Too many drivers turn in one lap at high speeds, one slow, and several scattered hither and yon between. Unofficially clocking the Mercedes from time to time we found his laps varying less than 1/10th of a second!

O'Shea's running mate, A. R. Simmons, was hotly pursued by Durbin in an Austin-Healey—so hotly pursued that they bumped slightly on the second lap and Durbin took over second spot. This lasted until Simmons apparently decided that he was loafing a bit and the other Silver grey car moved back into second. Here the positions remained until the eighteenth lap when a bit of fancy cornering let both Durbin and McCormick into the second and third spots for the final lap.

The production Jaguar race probably took the highest toll of tempers and cars of any on the program but was one of the most exciting yet held. Out of the nineteen official entries, five finished, with Charley Wallace leading from the first lap on. Doc Thompson, eschewing the Porsches for a Jaguar, took over second spot on the fifth lap and, except for a bit of tight work in one corner with Doctor Wylie, held the spot until Bob Bucher dislodged him on the eleventh go-round. The effort was apparently too much for Bucher's car and while Malarkey's machine was burning merrily on the back stretch, Bob retired with undisclosed but probably heating problems.

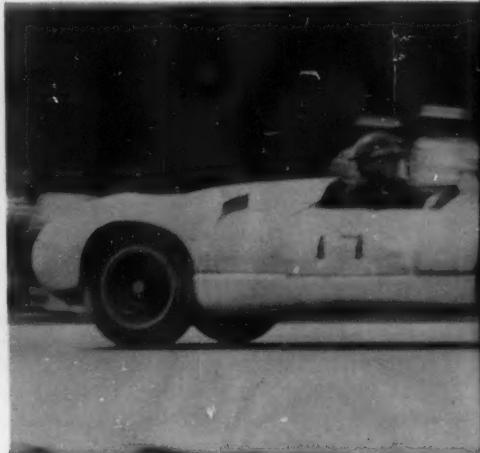
On lap fourteen Doctor Wylie retired with a collapsed wheel and Thompson closed in a bit on Wallace, but not enough, as the clock ran out leaving Wallace, Thompson, Constantine, Sarle and Mull in that order to receive the checkered flag.

The tenth race, scheduled as one of the day's high spots proved to be both the high and low at Cumberland. It is unfortunate that accidents will happen in racing but in this instance there was relatively little damage done and the parties involved were all officials who know the risk. In short, it was one of those things and no blame can be found either with the driving or organizing.

To put the race into its chronological order Donald McKnought pushed the Porsche 550 into the lead on the first lap, and in the company of Stewart's OSCA and Crawford's Porsche 550 began to circulate very rapidly. In lap eight Stewart went into the lead and maintained it

for three tours while Gordon Lipe in the Pooper (a Porsche-engined Cooper with a most attractive aluminum body) moved into third. Lap eleven saw McKnought back in the lead and in lap thirteen Lipe had moved into second and was pressing the 550 strongly.

On lap fourteen McKnought braked hard for the esses, lost the car, and crashed into the area at the start-finish line, injuring five officials in the area. Fortunately only two were detained at the hospital where their injuries were reported slight. One suggestion we would make would be to move the officials and start-finish line to a point along the center of the straight. The position just as a car is entering a corner or just as it is leaving is a risk on any course. We feel too that the yellow flag would have been sufficient in this case but the excitement was enough



One of the most hotly contested races of the day involved the flock of Austin Healeys like these.

to bring out the red and perhaps it was indeed justified.

When the race was re-started Lipe took the lead in the Pooper and was never seriously threatened, with Stewart and Linge following him to the end.

Race eleven brought out more high performance machinery than we have seen in one place since the Sebring affair. Walt Hansgen, Jim Kimberly, R. B. Publicker, Sherwood Johnston, J. M. Lyeth, all with Ferraris, Briggs Cunningham, Bill Spear, Bill Lloyd, Fritz Koster and T. A. Friedman with Maseratis and a field made up of Lancias, Austin Healey 100S, Arnolt Bristols, a Veritas driven by "Derf Eesol" and a Morris M with Roger Wing aboard.

The collective noise of all this machinery at the start of the race will be long remembered, as will the first lap

with Bill Lloyd, Walt Hansgen, Sherwood Johnston and Bill Spear roaring into the esses in a pack. On the next circuit Johnston had moved into first position and Kimberly had passed, but in no way outdistanced Briggs Cunningham, while Lloyd and Spear filled the second and third spots. On the fourth lap Spear moved up very rapidly to overtake Johnston and began challenging for the lead, while Cunningham and Kimberly continued their little private hassle in fourth and fifth spots, while the rest of the pack began sorting themselves out.

On lap eight Hansgen dropped out with Ferrari troubles, and Roger Wing had difficulties with the Studebaker engine in the Morris. Spear and Johnston were well out in front and beginning to overtake the dawdlers, with about ten feet separating the two cars and Spear

Gordon Lipe in the class-winning "Pooper" startled everyone with the Porsche-engined special's speed.



Results

Subject to official revision

RACE I: Production MG, Junior drivers. Overall and Class F: L. K. Cracraft, 54.2 mph., MGTF; R. D. Ryder, MGTF; Foxy Carter, MGTF. Class G: F. W. Baptista, MGTC; G. F. Valentine, MGTC; F. Reynolds, MGTD.

RACE II. Production and Modified to 2 liters, Junior drivers. Overall: N. Christianson, Porsche 550, 59.3 mph.; R. Cuomo, Arnolt Bristol; J. R. Johnston, OSCA. Class E Prod.: M. Ashley, Triumph; R. W. Zeigler, Dorette; J. L. Baucher, Dorette. Class F Prod.: B. Soderstrom, Porsche; R. C. Zeile, Porsche; R. R. Roop, Porsche. Class E Mod.: R. Cuomo, Arnolt Bristol; J. Bojalad, AC Ace. Class F Mod.: N. Christianson, Porsche 550; J. R. Johnston, OSCA; C. Strong, MG. Class G Mod.: R. H. Toland, Denzel; C. W. Finkl, Porsche; K. C. Wanamaker, MG. Class H Mod.: W. Weldon, SIATA; W. S. Mitchel, SITA.

RACE III. Class D, Junior drivers. Overall: J. R. Schaeffer, Ferrari; V. Sardi, A-H 100S; J. E. Hugus, Mercedes 300SL. Modified: J. R. Schaeffer; V. Sardi; G. Bortin, A-H 100S. Production: J. E. Hugus; H. G. Kunz, A-H; J. Quackenbush, A-H 100.

RACE IV. Production and modified over 3 liters, Junior drivers. Overall and Class C: R. Kessler, XK 140 MC, 59.6 mph.; P. H. Norair, XK 140 MC; H. E. Carter, XK 140 MC. Class B: No finishers.

RACE V. Ladies Race: Overall: S. Dietrich, MGTC (sc); P. Wyllie, Jaguar C; E. Mull, XK 120M. Over 2000 cc.: P. Wyllie; E. Mull; J. Ellis, XK 140MC. Under 2000 cc.: S. Dietrich; I. Haskell, SIATA; M. Steele, MGTD.

RACE VI. Production MG, Senior drivers. Overall: J. E. Ryan, MGTF 1500; R. L. Nash, MGTF 1500; R. L. Durbin, MGTF. Class F: J. E. Ryan; R. L. Nash; S. Spitler, MGTF 1500. Class G: R. L. Durbin; W. R. Long, MGTF; F. Reynolds, MGTF.

RACE VII. Production Class E and F, less MG, Senior drivers. Overall and Class E: G. Andre, Morgan, 58.2 mph.; G. A. Rubini, Morgan; J. Robinson, TR 2. Class F: L. C. Underwood, Porsche; C. C. Lawrence, Porsche; W. R. Lilley, Porsche.

RACE VIII. Production Class D, Senior drivers: P. O'Shea, Mercedes 300SL, 61.7 mph.; R. D. Durbin, Austin-Healey; J. R. McCormick, Austin-Healey.

RACE IX. Production Class C, Senior drivers: C. Wallace, XK 140 MC, 60.2 mph.; R. K. Thompson, Jr., XK 140M; G. J. Constantine, XK 120M.

SPORTSMANSHIP TROPHY awarded to Peggy Wyllie.

(Note: Results of the two final races on accompanying lap charts. These are not the official charts of the race which were not available to us but we believe they closely correspond to the actual positions of the cars during the race.—Ed.)

RACE 10

| Car No. | Driver | Class | Laps | | | | | | | | | | | | | Re-Start | | | | | |
|---------|-----------|-------|------|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|----|----|----|----|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 1 | 2 | 3 | 4 | 5 |
| 14 | Lipe | F | 7 | 7 | 4 | 6 | 6 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | — | 3 | 1 | 1 | 1 | 1 |
| 86 | Stewart | F | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 3 | — | 2 | 3 | 2 | 2 | 2 | 2 |
| 31 | Linge | F | 6 | 6 | 7 | 5 | 5 | 6 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | — | 4 | 3 | 3 | 3 | 3 |
| 131 | Crawford | F | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | — | 3 | 4 | 4 | 4 | 4 |
| 266 | Eager | F | 5 | 5 | 5 | 6 | 6 | 7 | 6 | 6 | 10 | 9 | 9 | 6 | 5 | — | 5 | 5 | 5 | 5 | 5 |
| 6 | Black | J | 4 | 4 | 6 | 7 | 7 | 8 | 7 | 7 | 7 | 12 | 11 | 11 | 10 | — | 6 | 6 | 6 | 6 | 6 |
| 25 | Dietrich | G | 9 | 9 | 10 | 10 | 10 | 11 | 10 | 9 | 9 | 10 | 16 | 17 | 17 | — | 7 | 7 | 7 | 7 | 7 |
| 188 | Papadilis | G | 13 | 13 | 13 | 13 | 13 | 14 | 13 | 12 | 12 | 12 | 17 | 17 | 18 | X | — | 8 | 8 | 8 | 8 |
| 33 | Proctor | F | 10 | 10 | 9 | 9 | 9 | 10 | 9 | 8 | 8 | 13 | 13 | 14 | 13 | — | 13 | 13 | 10 | 9 | 9 |
| 78 | Linton | F | 11 | 11 | 11 | 11 | 11 | 12 | 11 | 10 | 10 | 18 | 16 | 15 | 16 | — | 10 | 9 | 9 | 10 | 10 |
| 67 | Hast | F | 12 | 12 | 12 | 12 | 12 | 13 | 12 | 11 | 11 | 15 | 15 | 15 | 15 | — | 14 | 13 | 13 | 11 | 11 |
| 168 | Manting | F | 14 | 17 | 17 | 17 | 17 | 17 | 15 | 14 | 14 | 6 | 6 | 7 | 7 | — | 9 | 11 | 12 | 12 | 12 |
| 11 | Villard | H | 19 | 21 | 21 | 21 | 21 | 23 | 20 | 24 | 26 | 19 | 19 | 20 | X | — | 12 | 14 | 14 | 13 | 13 |
| 142 | James | F | 13 | 15 | 16 | 16 | 16 | 16 | 15 | 15 | 8 | 8 | 10 | 9 | 9 | — | 16 | 16 | 16 | 16 | 14 |
| 97 | Limbocker | F | 17 | 19 | 19 | 19 | 20 | 17 | 18 | 16 | 16 | 7 | 7 | 8 | 8 | — | 11 | 15 | 15 | 15 | 15 |
| 228 | Johnson | H | 20 | 20 | 20 | 20 | 21 | 19 | 17 | 21 | 21 | 11 | 12 | 13 | 13 | — | 16 | 17 | 17 | 16 | 16 |
| 182 | Hanes | G | 16 | 18 | 18 | 18 | 19 | 18 | 19 | 19 | 9 | 10 | 10 | 12 | 13 | — | 19 | 18 | 18 | 17 | 17 |
| 235 | Hamill | H | 18 | 22 | 22 | 22 | 22 | 23 | 23 | 23 | 23 | 20 | 20 | 22 | X | — | 15 | 19 | 19 | 18 | 18 |
| 77 | Bentley | G | 15 | 14 | 16 | 16 | 15 | 14 | 13 | 13 | 16 | 16 | 16 | 19 | X | — | 12 | R | | | |
| 178 | McKnight | F | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | R | | | | | |
| 84 | Womble | F | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | R | | | | | |
| 277 | Fosmire | H | 23 | 23 | 25 | 25 | 25 | 25 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | R | | | | | |
| 69 | McArthur | H | 21 | 21 | 23 | 23 | 23 | 23 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | R | | | | | |
| 256 | Dominian | H | 22 | 22 | 24 | 24 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | R | | | | | |
| 75 | Kahn | G | 16 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | R | | | | | |

X—Did not complete lap.
R—Retired.

trying mightily to overtake the Ferrari of Johnston's, which was trying just as mightily not to be overtaken. Bob Fergus moved up steadily in the A-H 100S and Koster and Friedman began their race-long duel.

By the fifteenth lap the race had turned into a series of two-car battles all around the circuit in every category. Kimberly seemed none too happy at this point and Briggs was keeping the Maserati awfully close to the big, 4.9. Wonder in the Frazier-Nash was ahead, but not by a satisfying margin, of Koster and Friedman and stayed there until the twentieth lap, when they went boiling past, still intent on each other.

In the twenty second lap, Cunningham passed Kimberly, who ducked into the pits for a minute and Fergus rather slyly slipped into fourth spot. Briggs passed him on the next lap and on the twenty-fourth Friedman took over the Class E lead.

Kimberly returned to the race, made one or two fast circuits, one or two slower ones, retired to the pits, came back out, then gave the whole thing up in favor of events with longer straights. The Bandini Offenhauser piloted by Michaels lent moral support to the 4.9 Ferrari by having Offenhauser type troubles on the back stretch and still Spear and Johnston screamed around the course without easing off. Bill Lloyd, driving his usual quiet but impeccable race, was firmly in third spot and circulating more rapidly than was readily apparent.

And so it stayed until the end, to finish one of the fullest and brightest days of racing in the area. The one accident was disconcerting. We feel sure that the officials will take cognizance of the exposed position of the start-finish line and that there will be no chance for a recurrence. The precision of starting the races was well worth the rather, to us, disappointing system of running on a time rather than a lap basis, but we will gladly try to accustom ourselves to the new order, if all events can operate as smoothly. In short, we feel that Sports Car racing in the United States is rapidly attaining its full growth, and this event was the "best yet," until the next one.

Paul O'Shea and the Mercedes had his race completely in hand from the start to the finish.



RACE ELEVEN

Lap

Desert duel

Bakersfield Road Race

S TERLING Edwards boomed home an easy winner after Jack McAfee flipped while making a desperation bid to grab the lead in the main event at the Bakersfield (California) road race, held on nearby Minter Field.

For the blistering first half of the race neither of the participants in the climactic duel seemed destined to be in the running for top spot. Bill Murphy poured the coal to his Kurtis-Buick and had roared into a commanding lead by the end of the second lap. By this time Sterling Edwards, who finished second behind Phil Hill at Pebble Beach, had brought his screaming Monza Ferrari into second spot and Jack McAfee was working his way up through the pack in Tony Parravano's 4.5 Ferrari. On the next lap McAfee took a firm hold on third.

As they roared into the eleventh lap, Murphy's pace had visibly slowed and Edwards was rapidly closing the gap. Then Murphy was forced into the pits, to be seen only briefly before retiring from the fight for the rest of the afternoon.

Meanwhile, McAfee had been relentlessly cutting down Edwards' lead and now began a determined effort to overtake him, picking up four seconds a lap on the leading car. Both cars were well ahead of third running Johnny von Neumann, tooling his Ferrari 750.

As the twentieth lap rolled past, McAfee had moved to within inches of the tail of Edwards' Ferrari. Storming into the front straight, McAfee shot past to momentarily capture the lead. But the speed built up for the move proved too much for the Parravano Ferrari. It slammed

Photos by Art Connell





Victorious Sterling Edwards.

through turn one, fishtailed wildly as it roared out of the second turn and went completely out of control on the decreasing radius of turn three, hitting the hay bales and overturning. McAfee was not injured.

From there on it was all Edwards, with von Neumann finishing second and Ak Miller bringing his Mexican road racing Olds Special in for third.

Due to delays that caused the main event to start nearly 1½ hours late and the threat of rain, the final race was called off at the end of 23 laps, 12 short of the scheduled distance.

The day's activity got under way with the dash for production cars under 1300 cc. and modified cars under 750 cc. The winner was apparent from the starting flag.

Floyd Burt, who was to roll his car on turn three later in the day, moved his MG TC into the lead on the first lap and consistently increased his advantage. On lap two, R. J. Plass took over second with his MG TD and Stiles Decker finished third after John Lawrence's MG TD ran out of road on fast corner.

In race two, a 6-lap sprint for production cars from 1300 cc. to 2000 cc. and modified cars from 750 cc. to 1500 cc., a tight battle raged for first spot between Marion Playan at the wheel of his MG Special and Dr. William Eschrich in an Offy Special.

Only inches apart, the two cars bored into turn ten on the fourth lap, but Eschrich misjudged the 90 degree corner and slammed into the hay, leaving Playan alone, well ahead of the pack.



Kunstle corners in Devin-Panhard.

John Kunstle brought his sizzling Devin Panhard in for second place, followed by Jimmy Dean in his white production Porsche.

Jim Seeley in the Cannon MK IV Special had no competition in the go for production cars over 2000 cc. and modified cars over 1500 cc. So commanding was his lead that he couldn't even be seen by the second place car on the long front straight. Ak Miller's Olds Special finished second.

Surprise in this event came as a blazing hot supercharged MG, under the highly capable hands of Harold Erb, finished third, after closing consistently on Miller's car during the final laps.

It was during this race that tragedy struck on the track, leaving a pall over the rest of the afternoon. Roaring into the decreasing radius bend on turn three, Jack Drummond lost control of his Austin-Healey and flipped. He was dead upon arrival at the hospital.

Jerry Austin and Ignacio Lozano took up the duel where it had left off at Pebble Beach in the race for production cars of all classes and the results were the same.

Austin leaped into the lead with his Jaguar XK 140 MC immediately, but lost it on lap five when Lozano bombed ahead in his XK 120 and successfully fought off the constant challenges for the remaining five laps.

With more room in which to unwind than he had at Pebble Beach, Terry Hall roared his Mercedes 300 SL in for a securely held third.

The Ladies event provided some of the best racing of



Results

Subject to official revision

RACE I: Over all and class G: Floyd Burt, MG TC; R. J. Plass, MG TD; Stiles Decker, MG TD; Arthur Gebhart, MG TF. Class H: Dr. Paul Winters, Halliday-Renault; James Orr, Devin Panhard.

RACE II: Over all: Marion Playan, MG Special; John Kunstle, Supercharged Devin Panhard; James Dean, Porsche. Class E: Jack Johnston, TR-2; William Watkins, TR-2; Al Newton, XK-2. Class F modified: Marion Playan, MG Special; Dr. William Eschrich, Eschrich Offy. Class F production: James Dean, Porsche; Don Britton, Porsche Spyder; Jim Parkinson, MG TF. Class G modified: John Kunstle, Supercharged Devin Panhard; Skip Swartley, OSCA; Fraser Sibbald, Morris Minor Special.

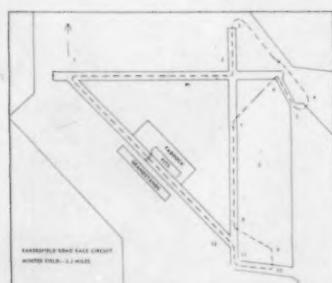
RACE III: Over all: Jim Seeley, Cannon MK IV; Akton Miller, Olds Special; Harold Erb, Supercharged MG TC. Class B modified: Akton Miller, Olds Special; Rod Carbeth, Allard Special. Class C production: Herbert Jones, Jaguar XK 120; Duane Pode, Jaguar XK 120; N. H. Yarter, Jaguar XK 120. Class C modified: Jim Seeley, Cannon MK IV; Don Driscoll, Lincoln-Ford; Dick Figueroa, Jaguar XK 120. Class D production: E. Forbes-Robinson, Austin-Healey; Earl Grafton, Austin-Healey; John Koich, Morgan. Class E modified: Harold Erb, Supercharged MG TC.

RACE IV: Over all: Ignacio Lozano, Jaguar XK 120; Jerry Austin, Jaguar XK 140 MC; Terry Hall, Mercedes 300 SL. Class C production: Ignacio Lozano, Jaguar; Jerry Austin, Jaguar; N. H. Yarter, Jaguar. Class D production: Terry Hall, Mercedes 300 SL; E. Forbes Robinson, Austin-Healey; Roy Jackson-Moore, Austin-Healey. Class E production: Al Newton, TR-2; Edward Boyd, Swallow Doretti. Class F production: Springer Jones, Porsche Super; Bill Friedauer, Porsche; Jim Parkinson, MG TF 1500. Class G production: D. R. Feuerhelm, MG TC; Judd Bradley, MG TD; Jack McAfee, MG TD.

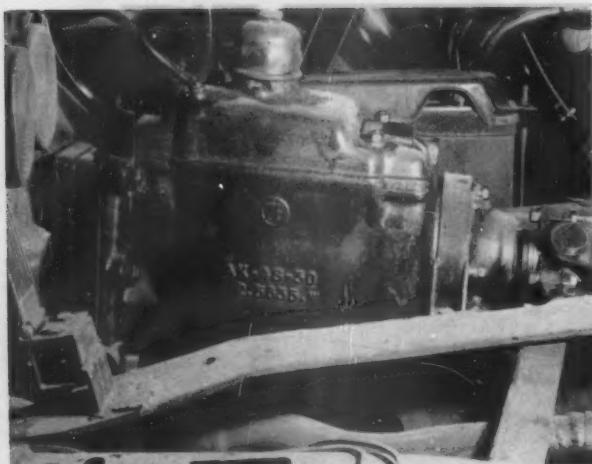
RACE V: Over 1500 cc.: Marion Lowe, Frazer-Nash; Josie von Neumann, Ferrari Mondial; Jane McBratney, Morgan. Under 1500 cc.: Lou Walker, MG TD; Carmela Clark, MG TF.

RACE VI: Over all and class F modified: John von Neumann, Porsche 550; George Beavis, Beavis Offy; Harry Chapman, OSCA; Marion Playan, MG Special. Class F production: Springer Jones, Porsche Super; James Dean, Porsche; Geo. Conroe, Porsche. Class G production: D. R. Feuerhelm, MG TC; Judd Bradley, MG TD; Stiles Decker, MG TD. Class H modified: John Kunstle, Supercharged Panhard; Skip Swartley, OSCA; Jack Anderson, MG TD. Class I modified: James Orr, Devin Panhard; John Porter, Ardvark-Panhard; Robert Hollbrook, Crosley Special.

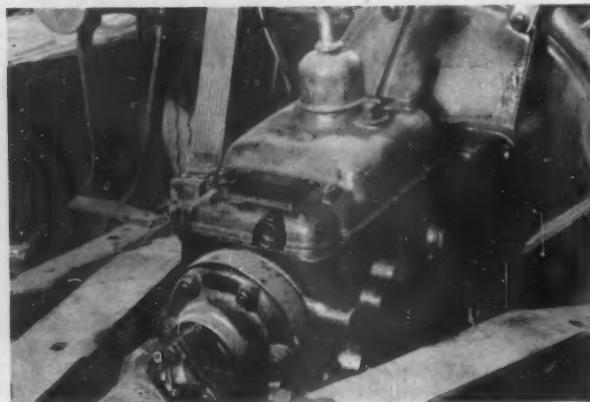
RACE VII: Over all: Sterling Edwards, Ferrari Monza; John von Neumann, Ferrari 750; Akton Miller, Olds Special; Robert Cardwell, Allard J2X. Class 2 modified: Akton Miller, Olds Special; Robert Cardwell, Allard J2X; Bill Pickford, Leo Marino. Class C modified: Don Driscoll, Lincoln-Ford; Jim Seeley, Cannon MK IV; Jack Douglas, C-Jaguar. Class C production: Jerry Austin, Jaguar; Ignacio Lozano, Jaguar; Don Levinson, Jaguar XK 140. Class D modified: Sterling Edwards, Ferrari Monza; John von Neumann, Ferrari 750; Wm. Pringle, Austin-Healey 100S. Class E production: Roy Jackson-Moore, Austin-Healey; Richie Ginther, Austin-Healey; John McLaughlin, Austin-Healey. Class F modified: James Lowe, Frazer-Nash; Marion Lowe, Frazer-Nash. Class G production: Al Newton, TR-2; Edward Boyd, Swallow Doretti.



The Le Mans Start.



Zahnradfabrik Friedrichshafen gearbox is light and compact, will take almost unlimited torque.



ZF gearbox installed in the chassis for one of Bill Frick's Cadillac-powered sports touring specials.

Geared to

GO

ONE of the big problems that has faced some of the sports cars in competition since the Allard paved the way for the installation of the high torque, big displacement engines in light weight chassis and bodies, has been the transmission.

Too often in the search for gears to replace the liquid gadgets Cadillac, Oldsmobile, Desoto and Chrysler come attached to, the builders have turned to units from lighter cars. These have usually worked well until that last ounce of punch was needed in a pinch and then unravelled completely. About the only way to assure the continued function of the cogs was either to dismantle the box and try to beef it up, or go out and machine your own component.

Now, however, the firm of Zahnradfabrik Friedrichshafen in Germany has come up with a solution that is really made to order for the high go machinery. The company, famed for the ZF limited slip differentials that were so much in evidence on the German racing cars before the war, has turned its attentions to the problem of gears and has come up with an answer. So good an answer in fact that the Cunninghams have been using the box from the C-4 on.

The ZF gearbox is a lightweight, aluminum constructed affair that seems to be practically foolproof. It will take all the power anyone is ever likely to want to use in one jolt and, best of all, it has synchromesh on all forward gears.

The box, designed primarily for sports car use, but easily convertible to other purposes such as Bill Frick's new sports-touring machine, is equipped with a central gear lever, and is adaptable to any of the more popular engines. There are two separate ratios too, one for competition and one for somewhat more tractable performance:

| | Competition | Road Use |
|---------|-------------|----------|
| 1st | 2.27-1 | 2.98-1 |
| 2nd | 1.66-1 | 1.99-1 |
| 3rd | 1.27-1 | 1.34-1 |
| 4th | 1.00-1 | 1.00-1 |
| Reverse | 3.98-1 | 4.58-1 |

At present the boxes are individually built in Germany for about \$900 a throw, but Bill assures us that they would tool up for production at about half that cost if there were fifty or so units on order.

—★—

Smart Motoring!



MAGNETTE

MORRIS



MG SERIES TF 1500 c.c.



MG MAGNETTE 1½ LITRE SALOON



MORRIS MINOR 800 c.c. STATION WAGON



RILEY PATHFINDER 2½ LITRE SALOON

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review of events

The Mille Miglia

- Moss-Jenkinson (2,996 c.c. Mercedes-Benz), 10 hours, 7 minutes, 48 seconds (98.01 mph.).
- Fangio (2,996 c.c. Mercedes-Benz), 10 hours, 39 minutes, 33 seconds.
- Maglioli-Monteferario (3,750 c.c. Ferrari), 10 hours, 52 minutes, 47 seconds.
- Giardini (2,000 c.c. Maserati), 11 hours, 52 minutes, 32 seconds.
- Fitch-Kessler (Mercedes-Benz 300SL), 11 hours, 29 minutes, 21 seconds (86.41 mph.). Gran Turismo winner.
- Sighinolfi (3,750 c.c. Ferrari), 11 hours, 33 minutes, 27 seconds.
- Gendebien (Mercedes-Benz 300SL), 11 hours, 36 minutes.
- Seidel (Porsche 1500), 12 hours, 8 minutes, 17 seconds.
- Bellucci (Maserati), 12 hours, 9 minutes, 10 seconds.
- Casella (Mercedes-Benz 300SL), 12 hours, 11 minutes, 15 seconds.
- G. Abecassis (Austin-Healey 100S), 12 hours, 21 minutes, 43 seconds.

MODIFIED PRODUCTION TOURING UP TO 750 c.c.:

- Galtier-Michy (Renault 4CV), 14 hours, 44 minutes, 56 seconds (record).
- Redele-Pons (Renault), 15 hours, 1 minute, 43 seconds.
- Gesmeir-Quesnel (Renault), 15 hours, 38 minutes, 35 seconds.

751-1,300 c.c.:

- Mandrini (Fiat), 13 hours, 48 minutes, 12 seconds.
- Villoti (Fiat), 13 hours, 58 minutes, 12 seconds.
- Guiraud-Abont (Peugeot 203), 14 hours, 9 minutes, 4 seconds.

Over 1,300 c.c.:

- Castelli-G. Musso (Alfa Romeo), 13 hours, 14 minutes, 5 seconds.
- Sala (Alfa Romeo), 13 hours, 14 minutes, 57 seconds.
- Stern (Alfa Romeo), 13 hours, 15 minutes, 51 seconds.

GRAND TOURING UP TO 1,100 c.c.:

- Viola (Fiat), 14 hours, 32 minutes, 30 seconds.

1,101-1,300 c.c.:

- Von Frankenberg (Porsche), 12 hours, 58 minutes, 39 seconds.
- Berghe (Porsche), 13 hours, 2 minutes, 55 seconds.
- Buticchi (Alfa Romeo "Giulietta"), 13 hours, 17 minutes, 18 seconds.

Over 1,300 c.c.:

- John Fitch-Kessler (Mercedes 300SL), 11 hours, 29 minutes, 21 seconds.
- Gendebien (Mercedes 300SL), 11 hours, 36 minutes.
- Casella (Mercedes 300SL), 12 hours, 11 minutes, 15 seconds.
- Castabarco (Fiat 8V), 12 hours, 24 minutes, 43 seconds.
- Da Silva Ramos-Bidille (Aston Martin), 12 hours, 43 minutes, 50 seconds.

DIESEL-ENGINED CARS:

- Retter-Larcher (Mercedes), 16 hours, 52 minutes, 25 seconds.
- Reinhardt (Mercedes), 17 hours, 12 minutes, 14 seconds.
- Maserati-Cardinali (Mercedes), 17 hours, 23 minutes, 30 seconds.

SPORTS UP TO 750 c.c.:

- Storez (D. B.-Panhard), 13 hours, 21 minutes, 3 seconds (record).
- Auricchio (Stanguellini), 13 hours, 55 minutes, 22 seconds.
- Navarro (Panhard), 13 hours, 58 minutes, 1 second.

751-1,100 c.c.:

- Bourillot (Osca), 13 hours, 1 minute, 21 seconds.
- Colantoni-Taglia (Osca), 13 hours, 12 minutes, 27 seconds.
- Nobile-Bettoli (Osca), 12 hours, 18 minutes, 38 seconds.

1,101-1,500 c.c.:

- Seidel (Porsche), 12 hours, 8 minutes, 17 seconds.
- Descoignes-Nicol (Osca), 12 hours, 29 minutes, 56 seconds.
- Lautenschlager (Porsche), 12 hours, 59 minutes, 52 seconds.

1,501-2,000 c.c.:

- Giardini (Maserati), 11 hours, 15 minutes, 32 seconds.
- Bellucci (Maserati), 12 hours, 9 minutes, 10 seconds.
- Sbraci (Maserati), 12 hours, 49 minutes, 4 seconds.

Over 2,000 c.c.:

- Stirling Moss (Mercedes), 10 hours, 7 minutes, 48 seconds (record).
- J. M. Fangio (Mercedes), 10 hours, 39 minutes, 33 seconds.
- U. Maglioli (Ferrari), 10 hours, 52 minutes, 47 seconds.
- Sighinolfi (Ferrari), 11 hours, 33 minutes, 27 seconds.
- Abecassis (Austin-Healey), 12 hours, 21 minutes, 43 seconds.
- Kammamuri (Ferrari), 12 hours, 40 minutes, 42 seconds.
- Pinzero (Ferrari), 13 hours, 14 minutes, 1 second.
- Macklin (Austin-Healey), 13 hours, 19 minutes, 27 seconds.
- G. Verilli (Austin-Healey), 14 hours, 38 minutes, 52 seconds.

Synopsis of the Le Mans race on page 51—Ed.

European Grand Prix

(Grand Prix of Monaco)

May 22, 1955

| Pos. | Driver | Car | Laps |
|------|-------------------------------|----------|------|
| 1 | Maurice Trintignant | Ferrari | 100 |
| 2 | Eugenio Castellotti | Lancia | 100 |
| 3 | Jean Behra and Cesare Perdisa | Maserati | 99 |
| 4 | Nino Farina | Ferrari | 99 |
| 5 | Luigi Villorosi | Lancia | 99 |
| 6 | Louis Chiron | Lancia | 95 |
| 7 | Pollet | Gordini | 91 |

Trintignant's time was 2 hours, 58 minutes, 9.8 seconds (65.81 mph.). Castellotti's time was 2 hours, 58 minutes, 30 seconds. Fastest time for one lap was made by World Champion Juan Manuel Fangio in a Mercedes-Benz at 1:43.4 (68.7 mph.) for a new record.

Indianapolis Results

| Fin. | St. | Car | Driver | Car Name |
|------|------|-----|-------------------|----------------|
| Pos. | Pos. | No. | | |
| 1 | 14 | 6 | Bob Sweiert | John Zink Spl. |
| 2 | 2 | 10 | Tony Bettenhausen | Chapman Spl. |
| 3 | 10 | 15 | Jimmy Davies | Bardahl Spl. |

| Qual. Speed | Laps Comp. | Av. Speed Mph. | Time | Purse |
|-------------|------------|----------------|------------|-------------|
| 139.996 | 200 | 128.209 | 3:53:59.53 | \$76,136.63 |
| 139.985 | 200 | 126.733 | 3:56:43.11 | 30,088.63 |
| 140.274 | 200 | 126.299 | 3:57:31.89 | 16,988.63 |

with the clubs

The prototype of the new and eagerly awaited series made by MG is tried out prior to Le Mans race by Ken Wharton.



WHILE not properly an item for club news, the unofficial results from Le Mans arrived at the office while we were preparing this column. The tragic accident that left in its wake a death toll of 77 and claimed the life of veteran driver Pierre Levegh overshadowed the otherwise record run and most eyes were turned toward the unhappy aspects rather than the race itself. The winning average of 107.5 maintained by the Hawthorne-Bueb Jaguar has inched the record up again in spite of the strain felt by drivers and crews alike. At the same time the Mercedes, driven by Moss and Fangio, was well on its way to setting a mark that might have stood as a permanent target when the team withdrew because of their teammate's accident. The Mercedes 300SLR had maintained a blistering 116 mph. average up to that point. For the information of those interested the first ten (unofficially) were Hawthorne-Bueb, Jaguar D, 107.5 mph., 2,584 miles; Collins-Frere, Jaguar D, 2,548 miles, and Claes-Swatters, Janguar C, 2,491 miles. The fourth, fifth and sixth cars were Porsches, seventh, eighth and ninth Bristols, and the tenth a Frazer-Nash.

We will have a full and official report on the entire race in the next issue, but believe that the first ten will stand.

* * *

A new course is being planned in Ohio as a joint venture. The group is selling stock to finance the new two and one-half mile paved road course. The shares at \$100.00 each at a 6% par value are offered through John LaFrance, 402 United Savings Building, Toledo, Ohio.

It looks like a most interesting course, with permanent pits, flag towers, grandstands and a club house for participating members. All inquiries are appreciated.

* * *

The Long Island Sports Car Association has announced the appointment of a new editor for the LISCA News. Rollie Guild, who has been holding down the demanding post for the past six months, has resigned with considerable regret and David Hebb, 110 E. 84th St., New York, has stepped into the office. We are sure that the exceptional publication will continue at its usual high quality.

* * *

LISCA also announces the Female Follies Rally to be run August 13. Chairman Ruth Joseph has announced that it will be run entirely by the girls and that it will start at 5 p.m. from the Mineola Court House. It will wind up with dancing at the Georgian Inn, Route 25, east of South Huntington.

* * *

News from California is that the Sports Car Club of America will sanction the Torrey Pines race scheduled for July 24. This will be a bit unusual in that the signaling systems will consist of colored lights rather than flags and should prove as popular an event as usual.

* * *

A new club is being formed in the United States and should be most welcome to a good percentage of the sports car population at any rate. Bill Sholar, 1542 Mount Eagle Place, Alexandria, Virginia, has let us know that a group has banded together to petition the factory for the formation of an official branch of the Porsche Owners Club. The parent organization publishes a wonderful little book (about Porsches) that makes even a veteran TC owner jealous. Any inquiries to Bill, please.

* * *

The Republic Motor Sports Club is holding its annual Economy Run on July 10th. They have entries of 150, covering almost every type of car available in the east. George Spagna, last year's winner, will again be driving the Porsche in which he racked up the almost unbelievable 81 ton-miles-per-gallon. Not content with that, he feels that he should be able to inch the tally up to 90 this time. There are 30 prizes, free Shell gasoline and a run of 100 miles at 30 mph. in store for the entrants.

The rally begins at the Farmingdale Plant of Republic Aviation and ends at Half Hollow Hills, Wyandanch. All inquiries to Jack Curtis, Republic Aviation Corporation, Farmingdale, L. I., N. Y.

* * *

We note that the Motor Sports Club of America has again received international listing for their most interesting Great American Mountain Rallye. This is a departure from their last year's event in that this one will be organized in two stages, with an option of entering both or the second stage only. The Monte Carlo type revision allows competitors to leave Jacksonville, Florida; Indianapolis, Indiana; Washington, D. C.; Kansas City, Chicago, Detroit, St. Louis, Atlanta, Boston, Toronto or Montreal for the trek to the starting point of the second leg. This leg will be the usual thousands of miles of mountain and snow course which has played havoc with some of the top drivers from Europe as well as ralliists from all over the United States.

It will leave New York City November 24, have an overnight stay at Lake Placid and return to Poughkeepsie for trials. We are looking forward to this one, and all inquiries should go to the M. S. C. A.'s GAMR Committee, 184 E. 93rd Street, New York 28, N. Y.

* * *

That's the news for this month. Remember, though, if you have an event that you want announced in WITH THE CLUBS, or a bit of skullduggery that you feel is interesting, let us hear early.

—☆—

shop talk

WITH the revival of interest in supercharging, and the presence on the market today of more and more "low pressure" units for passenger cars, there has come, hand-in-hand, the problem of tuning a supercharged car so that the best use can be made of the blowers.

There are a few small points that seem to be almost universally overlooked in installing the units, and a lot of dissatisfied owners of the bolt-on power packages can trace the cause of their disaffection directly to overlooking these details. Not that the units won't give an increase both in power and acceleration if tossed onto the engine in even the most casual manner. They certainly will, in fact, they *have* to give an increase. But they will give a great deal more with just a little extra work that is generally never thought of.

The first of these, since the supercharger is essentially concerned with carburetion, is the mixture it receives. The carburetors on almost half of the units we have seen have been mis-matched to the engine's requirements. This seems to stem from the theory that since the supercharger will force more combustibles into the cylinders, a richer setting is called for. This just isn't the case. A carburetor of the proper size to deliver the amount of fuel an engine needs at its maximum rpm should be able to meter it to the engine with the normal jet and needle combinations supplied as stock. On the S. U. the air flow should be figured at a rate of 150 feet per minute through the instrument. This fuel when compressed and homogenized in the supercharger will have to remain a standard combustion mixture, i.e., if the mixture is too rich going into the supercharger it will still be too rich when it reaches the combustion chambers.

Therefore, to avoid the inherent troubles of too rich or lean a mixture, it's a good idea to use the standard jets and needles with the carburetors recommended for the supercharger by the manufacturer. Another problem, not too noticeable in normal mounting but showing up glaringly when the units are fitted to a supercharger, is carburetor vibration. This is a source of a lot of small untraceable ills that beset the supercharged cars, especially when the turns reach up into the 5,000 or better marks.

This vibration will disturb the mixture before it has had a chance even to get to the supercharger, and you'll have spurts of richer and leaner fuel going into the engine. You may also find that adjustment settings shake themselves out of whack, and in at least one instance the whole top of the float chamber was found to be loose enough for the fuel to slop over the side.

A handy solution for this sort of activity is to replace the standard gasket with about a $\frac{1}{8}$ -inch thick piece of neoprene cut to shape, and used in place of the standard gasket. Fasten this with castellated nuts with short coil springs under them, and drill the carburetor mounting studs to take cotter pins to lock the nuts in place. When you're using a flexible gasket of this type though, be sure that you don't tighten the bolts enough to distort the neoprene and block the passage. Just draw the nuts down enough to prevent gasoline or air leaks, and lock them in that position.

At the other end of the supercharger there are some things that could be done to improve most installations too. The most glaring of these, and one that seems to be rarely thought of, is matching the supercharger ports to the engine or manifold. There are a lot of variances in this fitting with the components made by the automobile manufacturers themselves, and when you're dealing with additional units made outside the factory the chances of their being perfectly matched are pretty slim. Of course, there's the falacious theory that the supercharger will pack the mixture into the engine no matter what. This is partially true, but it's rather like bumping your head against a board fence in preference to a stone wall. It's better to not bump your head at all!

At the same time, some opinion seems to favor leaving the valves and springs alone, and let the blower work overtime. Again you're just handicapping yourself, and the addition of larger valves will give you a marked increase in go. The heavy springs are a necessity. A supercharger increases your engine's horsepower by putting more kick behind each power stroke. This will give you more acceleration, but your top speed is still governed by rpm/gearing factors, and unless you can increase your engine's rpm you won't gain anything in this department.

To continue with the same thought, most top rpm is governed by valve float or crash. Here you have the reason for the heavier springs, they will let you run the engine up a few extra turns, your supercharger will supply the extra push to get them, and you have a few extra miles per hour at the rear wheels.

On the subject of breathing, you should consider the bit about "what goes up," and what it has to do then. If you add a supercharger to pack more combustible, exhaust-making compounds into the engine, then you have to do something about getting this increased load out. Here most standard exhaust systems are designed for standard aspiration, and you'll be building up more back pressure than an engine could normally develop with standard carburetion. To be *really* effective, refitting the exhaust should begin at the manifold and work all the way back, but a usable system can be made by just increasing the diameter of the plumbing beginning with the muffler. Remember that although the increase given by a straight pipe is only about three per cent, if you have boosted the performance the amount most supercharger manufacturers claim, you'll find the three per cent surprisingly gratifying.

In a supercharged engine the main and connecting rod bearings take the proportional beating that goes with increased horsepower. In most cases they are up to it, but remember that they should be checked from time to time just to be sure.

Valve settings are just as important as the size of the valves in a supercharged setup. They are almost universally set too close when at factory specs. An extra opening of .003 or so should give you a couple of extra horses at top end and if you're racing you won't mind the clatter. Around town you can bring them back down if the noise bothers you.

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Rear-engined 1100 cc Cooper as seen recently at Goodwood.



Reg Parnell entering the final lap to win the Silverstone race.

By CHARLES DUNN

TYPE D Jaguars destined for Le Mans, had a dress rehearsal at the International Silverstone Race Meeting. They were convincingly defeated by Aston Martin Team, who ran their cars into first and second places. One D Type Jag driven by Mike Hawthorn was in first place by a 7 second margin until 4 laps before the end of the 25 lap race, but retired when a top water hose burst. The other two Jaguars were well beaten by Aston Martins and were noticeably unsteady in corners. If the Jaguars are to put up a real battle against Ferrari and Mercedes, much work will have to be done between now and the big Le Mans race. In any case, the Germans are going to be very formidable this year.

The rear engined 1100 cc. Cooper Sports Car built this year by designer John Cooper is without doubt not only the sensation of the British sports cars but should be easily superior to anything on the Continent. The car is powered by the overhead camshaft Coventry Climax engine which pushes out 75 bhp.

In order to illustrate the fantastic performance of this car it is interesting to look into its record so far this season. It has won every race for which it has been entered. At International Silverstone it won its class, and finished ahead of all the 1½ and 2 liter cars, put up a lap record which was also fastest in the 1½ liter class and did the last half of the race in top gear only. The dry weight of the car is only 896 pounds. A tubular frame of 18 gauge steel is used and this frame is only around 65 pounds. Suspension both at front and rear is by transverse leaf springs with single wishbones at each side. Instead of anchoring the springs directly to the chassis they are anchored to a spring blade which is itself anchored to the chassis, this method will increase roll stiffness. Gearbox is Citroen, mounted at rear and housed in unit with the differential—it has four gears and they are a special unit manufactured in France for fitment as an extra to Citroen cars.

Quite apart from phenomenal roadholding and brilliant acceleration the ultimate maximum speed using high axle ratio will be around 130 mph. all for 1100 cc. It is likely that this ratio will be used for the car at Le Mans.

One patron of English Motor Racing, Mr. Bob Chase, has bought one of these little cars and is insinuating a 2 liter Bristol power unit into the chassis—we await its debut with interest in the knowledge that this engine produces not less than 135 bhp.

The 1100 cc. Cooper is available to United States but the waiting time is 4 months—it's a worthwhile wait. Around \$4,000 is the price.

EUROPEAN NEWS LETTER

This view of the Cooper shows the car's "cut off" rear end.



Ken Wharton's Vanwall hit marker post. He escaped injury.

On the Schedule

SCCA

July 17 Rally (Washington Region).
 July 17 Nebraska City Picnic (Nebraska Region).
 July 17 Second Annual Dam Rally (Atlanta Region).
 July 17 Annual Picnic (Central Illinois Region).
 July 17 Second Drivers' School (Neohio Region).
 July 22 Hill Climb, Giants' Despair, Wilkes-Barre, Pa. (National Event).
 July 23 Regional Race, Brynfan Tyddyn, Wilkes-Barre, Pa.
 July 24 Family Day (Detroit Region).
 July 31 Race, Seattle Seafair, Seattle, Wash. (National Event).
 July 31 Race, Wisconsin Fairgrounds, Milwaukee, Wis. (National Event).
 Aug. 7 Gymkhana Dandies (Nebraska Region).
 Aug. 7 Rockford Races (Chicago Region).
 Aug. 14 Hillclimb, Mt. Washington, N. H. (National Event).

International (FIA) Calendar

Grand Epreuves*

July 16 British Grand Prix, Aintree, England.
 July 16 German Grand Prix, Nurburgring, Germany.

Grand Prix and Sports Car Races

July 23-24 Grand Prix of Lisbon (Sports Cars), Lisbon, Portugal.
 July 24 Circuit of Caen, Caen (Normandy), France.
 Aug. 1 Brands Hatch Sports Car Races, Maidstone, England.
 Aug. 7 Swedish Grand Prix (Sports Cars), Stockholm, Sweden.
 Aug. 7 Circuit of Senigallia, Ancona, Italy.
 Aug. 7 Circuit of Cadours, Toulouse, France.

Rally Calendar

July 16 Tour of Dachstein, Austria.
 July 17 Rally of Var, Toulon, France.
 July 18-20 Adriatic Rally, Belgrade, Yugoslavia.
 July 24 Rally of St. Jean-de-Luz, Pau, France.
 July 27-31 Rally of Evian-Mont Blanc, Annecy (Savoy), France.

Aug. 6 Rally of Vendee, Brittany, France.
 Aug. 6-7 Circuit of Cimes, Pau, France.
 Aug. 7 Rally of Brittany, France.
 Aug. 14 Rally of Deauville, France.

July 24 The Circuit of Locarno, Switzerland.

Aug. 1 Brands Hatch, Maidstone, England.
 Aug. 7 Swedish Grand Prix, Stockholm, Sweden.
 Aug. 7 Circuit of the Sables-d'Olonne, Brittany, France.

* World Championship under Formula I.

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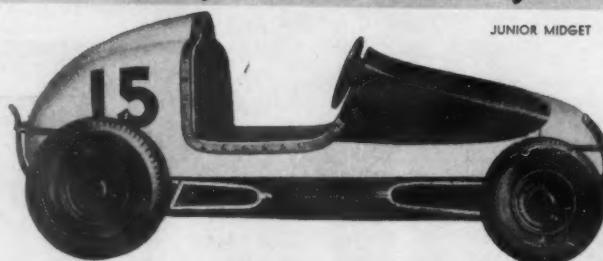
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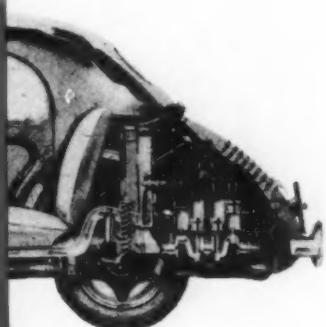
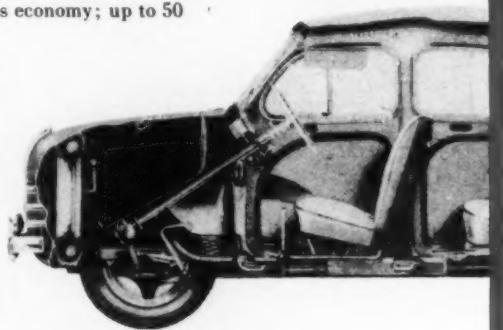
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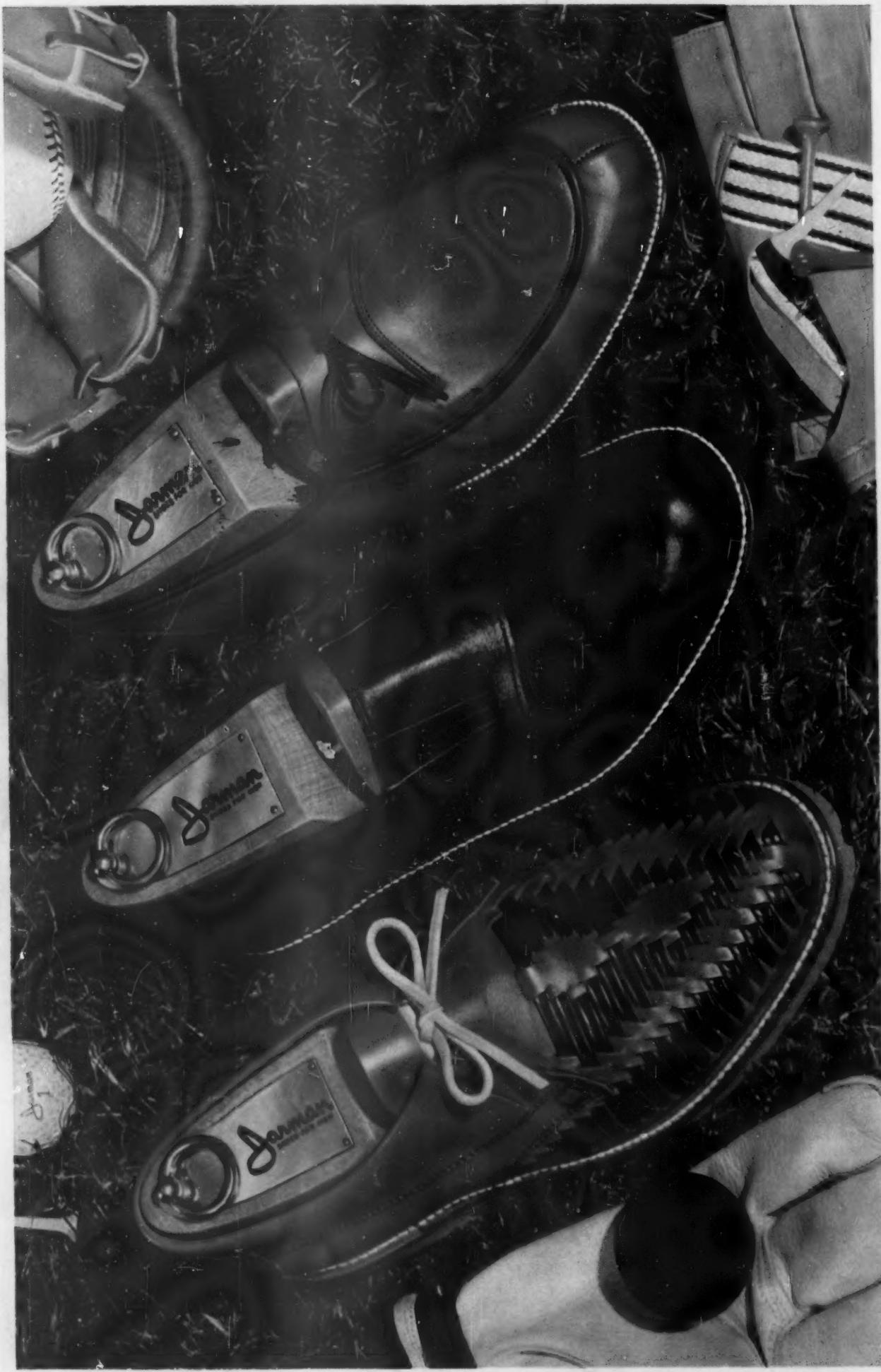
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